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FUTURE

ISSUE #289 **AUS**$13.99 **NZ**$15.90
PRINT POST APPROVED: 100003375 **ISSN:** 1326-5644

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12
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Printed in Australia by IVE
Distributed in Australia and NZ by Ovato
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ISSN 0728-441

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THIS TIME...

For sure!

Valve, has changed the way we game. From the games themselves, to building the juggernaut that is Steam, Valve's impact on the landscape cannot be underestimated. But some of its innovations haven't quite stuck the landing. Valve wanted compact gaming machines in every loungeroom in the shape of a Steam Machine, but it never really took off.

Now Gabe and his team are trying again, with a whole new form factor – the Steam Deck is a handheld device that borrows a lot from the Nintendo Switch. It's a lot more powerful, though, and really does add up to a PC you can take anywhere.

But, like Steam Machines and gaming consoles in the loungeroom, the Switch *is* right there in that same space... Good luck, Valve!
David Hollingworth

"Now Gabe and his team are trying again, with a whole new form factor – the Steam Deck."

Contents

COMPLETE ACCESS

STEAM DECK

→ FULL HANDS-ON PREVIEW

→ IN-DEPTH INTERVIEW & EXPERT ANALYSIS

→ VALVE'S GRAND PLAN FOR THE FUTURE OF HANDHELD

→ PAGE 050

Contents

FEATURE

ALTER EGO

P. 28

How tackling the Marvel universe revealed an unexpected new side of the XCOM team.

REVIEW

DIABLO II: RESURRECTED

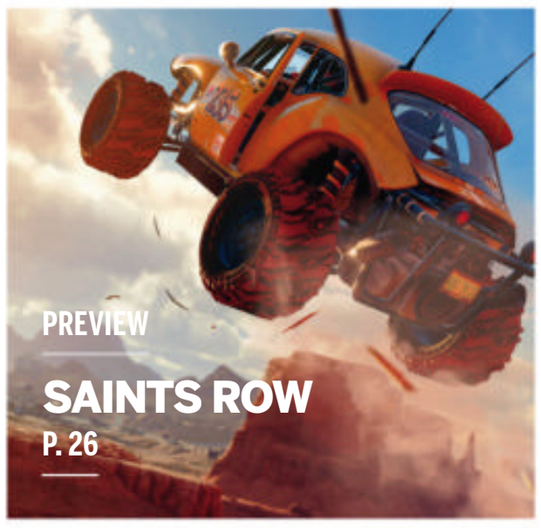
P. 68

FEATURE

THE DUNGEON MASTERS

P. 42

How D&D shaped every corner of PC gaming.



PREVIEW

SAINTS ROW

P. 26

REVIEW

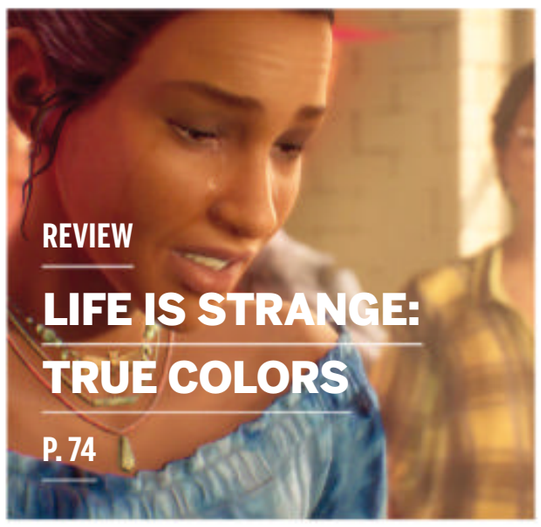
PATHFINDER: WRATH OF THE RIGHTEOUS

P. 72

REVIEW

DEATHLOOP

P. 65



REVIEW

LIFE IS STRANGE: TRUE COLORS

P. 74

FRONTEND

006 News
014 Report
016 Indie showcase

OPINION

010 JAM
012 Generation XX

FEATURES

022 Sifu
026 Saints' Row
028 Marvel's Midnight Suns
042 The Dungeon Masters
050 Valve's Steam Deck

GAME REVIEWS

065 Deathloop
068 Diablo II: The Resurrection
070 Medieval Dynasty
072 Pathfinder II
074 Life is Strange: True Colors
076 Gamedec

TECH

079 Corsair Virtuoso
080 Microphones group test
084 Webcams group test
092 This gaming life...
96 Why I love....

BUNGIE SAYS NEXT YEAR'S DESTINY 2 DUNGEONS WON'T BE INCLUDED IN THE SEASON PASS

The game's convoluted monetisation model is under the microscope again. Phil Savage

Technically Bungie announced this back in August, when it revealed The Witch Queen expansion. The two dungeons are available as part of the Deluxe Edition version of The Witch Queen, listed as a separate perk from access to the year's season passes. Nevertheless, by not outright saying that the dungeons weren't included, many assumed the opposite to be true.

The clarification finally came from Destiny 2 community manager Cozmo23 in a heavily downvoted Reddit comment. "We've seen some debate around the new dungeon content and wanted to clarify how it will be delivered next year," he wrote. "If you get the Digital Deluxe Edition of The Witch Queen you will receive the expansion, all four Seasons for the next year, and the two Dungeons. If you get the Standard Edition, you can still upgrade to the Deluxe Edition to get the dungeons later. We will also be offering a separate way for you to purchase the Dungeons in the future, but they will not be included in the Season passes."

God of War is coming to PC in January

Sony's tale of gods, monsters, and parenthood is listed on Steam now. Andy Chalk

"We're thrilled to announce that God of War (2018) will be coming to PC on January 14, 2022!" Sony Santa Monica Studio senior community manager Grace Orlady wrote on the PlayStation Blog. "All of us at Santa Monica Studio have been humbled by the immense amount of support and passions fans of the God of War series have shown in the latest chapter of Kratos' story since its release. As of August 2021, 19.5MM copies for God of War on PlayStation 4 have been sold through and we can't wait to share that experience with a whole new group of players on PC."

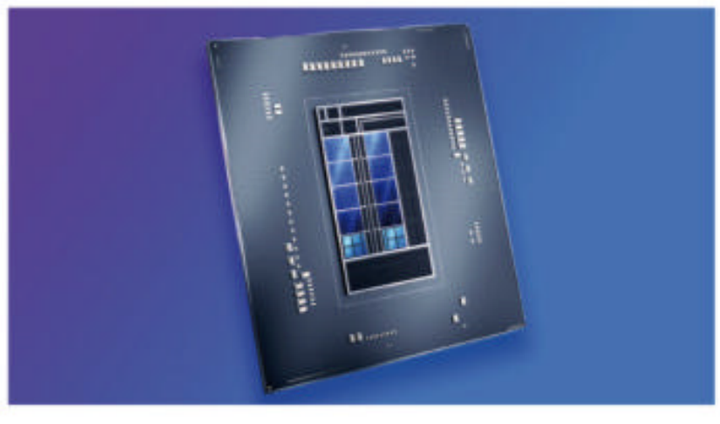
Make no mistake, this is a very big deal. Sony has previously expressed interest in bringing more of its first-party games to PC, and has recently committed to some big ones including big names like Horizon Zero Dawn and Uncharted 4. But God of War is not just another PlayStation game - it's a capital-P "Prestige" title that's won numerous acclaim and awards for both its axe-swinging action and its effective portrayal of fatherhood and family.

Rainbow Six Extraction may be out January 20

Ubisoft's own blog post about Extraction's gameplay debut from June has been quietly amended to give a release date of January 20. Presumably this bit of housekeeping was supposed to happen at the same time as a more official announcement, but Ubisoft has yet to make one. Rainbow Six Extraction lets you choose from 18 Rainbow Six operators to take on alien archæans over 12 maps.

Intel's Alder Lake chips can hit 330W when overclocked

Overlocked Intel Alder Lake CPUs are going to be power-hungry, if recent benchmark leaks are anything to go by, though it might not be as bad as you think. Twitter leaker 9550pro - who posted a CPU-Z benchmark of the apparent retail version of the upcoming 12th Gen chip - claims its full-on power consumption may reach heights of 330W.



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BLIZZARD ENTERTAINMENT

HOW BATTLEFIELD 2042 BETA PLAYERS FELT ABOUT 'THE NEXT GENERATION OF WARFARE'

Harsh criticism, hope for Portal, and the revelation that people like Battlefield 5 now. Tyler Wilde

For some Battlefield fans, last month's Battlefield 2042 open beta lowered their expectations for the full game, which will release this November after a month-long delay.

"I've had Battlefield disappoint me before, but this is the first time I actually thought the inherent core game was bad," wrote Reddit user TerrorFirmerIRL, who said they cancelled their Battlefield 2042 pre-order following their experience with the beta.

Former Battlefield esports competitor Xfactor, who currently streams Apex Legends and other games, had similar feelings. Battlefield 2042 is "flawed from a fundamental Battlefield shooter perspective," he told us. Not only was the beta unacceptably buggy to him - a flashback to Battlefield 5's launch - it featured "dumbed down" guns and other identity lapses.

My experience in the beta was often frustrating, but when I squadded up with some friends - we could only get three of us in a game, annoyingly - I had a good time playing tank commander and running around at the foot of a rocket ship. I also enjoyed bothering snipers with a flying drone... Clearly I am not a player of Xfactor's caliber.

Others here enjoyed the beta, too, and we weren't alone in having fun despite the some obvious flaws. "Most people I know IRL really liked the game," wrote TiToim on the Battlefield subreddit, "so I guess the small hater percentage come here on social media to express themselves."

Wherever players came down on the Battlefield 2042 beta, no one's denying that it was buggy as hell. One of the bugs highlighted by Xfactor is a returning bug from Battlefield 5, he says. A video he posted on Twitter shows a player seemingly materialising behind him after firing a couple silent gunshots.

DICE says that some of the issues that were present in the beta are already fixed in the version of Battlefield 2042 that's being prepped for November. The beta was also very limited: One map and mode accessible through a stripped down UI. Not everyone is convinced that the spacetime anomalies they experienced in the beta will be resolved by launch, though.

And even if the launch were wholly bug-free (unlikely), plenty of design complaints would remain for players like Xfactor. Another big target of criticism are Battlefield 2042's new specialists, which replace the usual classes. Like Rainbow Six Siege operators, specialists are characters who carry unique gadgets such as a healing pistol and grappling hook. Unlike Siege operators, they can otherwise carry any gun and equipment loadout. A sniper can have anti-tank rockets, an LMG user can have anti-air missiles. There are ammo crates, but who wants anything other than rockets and missiles and C5? (That's futuristic C4, I believe.)

"You can't tell who is next to you and who you are shooting," said Xfactor. "How do you prepare or counter that?"

There will be more specialists in Battlefield 2042's release version, so you won't necessarily see so many duplicates running around, although that won't necessarily help with identifying loadouts. Fans who are fundamentally opposed to the change have started looking to 2042's other offerings for hope, namely Battlefield Portal.

Portal will allow players to design and play custom game modes that pull weapons, vehicles, and maps from Battlefield 1942, Battlefield Bad Company 2, Battlefield 3, and Battlefield 2042. If it works, it could be an ideal answer to fans who don't like the new-style Conquest mode: Go to Portal and find a group of players who are using Battlefield 3 classes instead of specialists.

Later in November, I guess we'll find out.

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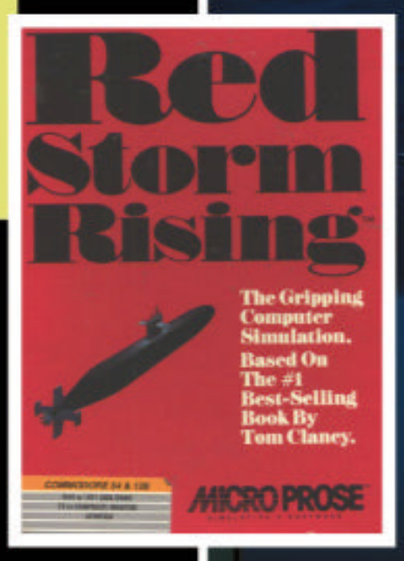

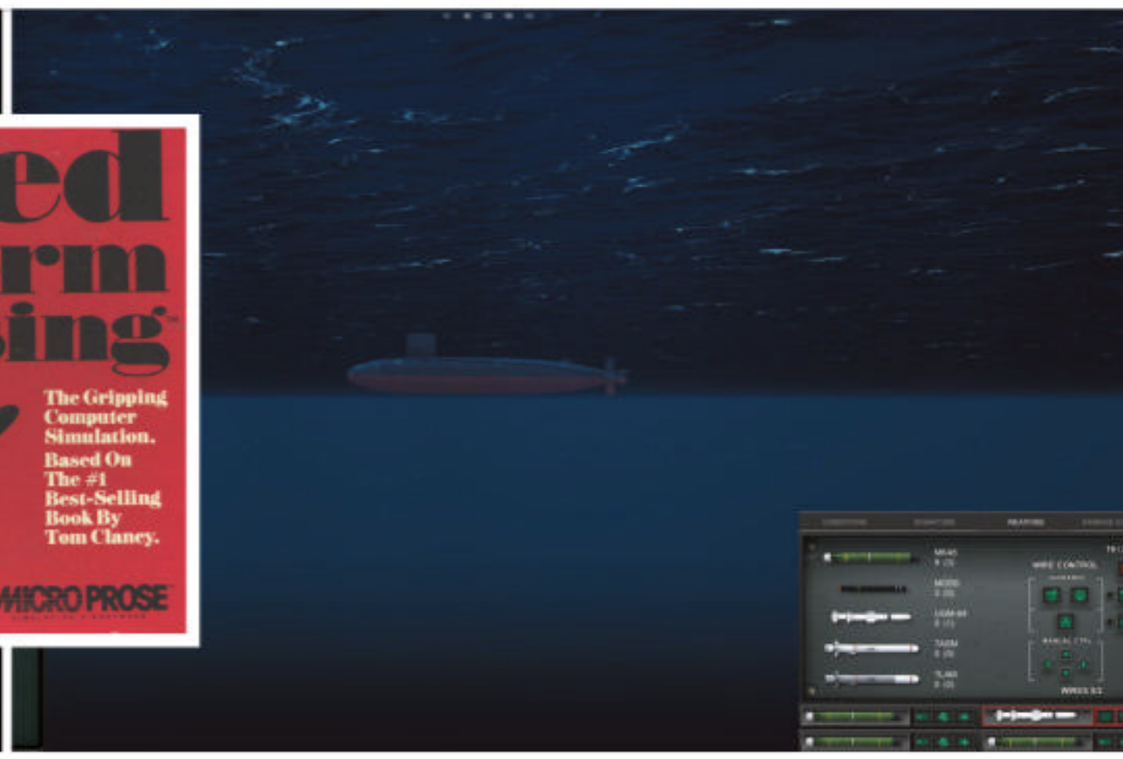

BLOOD OCEAN

In the not-too-distant future, Australia will rule the waves...

We promise that James Cottee isn't trying to make the region even more unstable...

It's always a tremendous shock when our elected leaders do something in the national interest instead of in the interests of their donors, which is why Australians were struck dumb when 'Scotty From Marketing' revealed the new 'AUKUS' alliance to the world. One moment he's making crude metaphors about the Stone Age children's movie The Croods, the next he's inking a deal to give Australia the most advanced weapons platform on the planet.

In exchange for letting the Brits and the Yanks base their war machines on our strategically-important landmass, they will gift us the technology to run our own fleet of nuclear-powered submarines. Such subs can move swiftly to hotspots around the world, stay submerged for months at a time, and carry dozens of torpedoes and cruise missiles, enough to send a carrier battle group to Davy Jones's Locker in a single salvo. If push comes to shove, they can even carry nuclear warheads – the ultimate weapon, delivered via undetectable death-tube.

It's been said that on the first day of World War 3 there will be two types of warships: subs and targets. To be fair, surface vessels do serve many useful purposes: enforcing trade embargoes, hunting pirates and drug smugglers, and making goodwill tours of friendly ports. They also make great artificial reefs, a role that many surface combatants will transition to in the opening days of the next major world conflict.

Nuclear-powered subs are expensive – very expensive. But they're worth it. SSNs are the crown jewels of any first-rate military power.

The magnitude of the AUKUS deal really drives home how little interest Ubisoft has in making the fullest possible use of the Tom Clancy brand, a brand the French mega-publisher owns outright.

With a new Cold War simmering in the waters just off Formosa, you'd think a Red Storm Rising remake would be a no-brainer for the company. But no, Ubisoft instead stamps the Tom Clancy name onto the most ubiquitous genre of all: freemium hero shooters. Tom Clancy's XDefiant isn't just unpronounceable, it's the answer to a question no-one asked.

There was a time not that long ago when publishers clamoured to fill game store shelves with innovative simulations of the world's most advanced weapons platforms, and none is more advanced than the SSN. It's the ultimate force multiplier – the decisions of a lone sub captain could well alter the course of history.

It's a very compelling premise for a game, and it's part of what made Tom Clancy's Red Storm Rising so magical. I have many fond memories of tooling around the Norwegian Sea Theatre in a race against time to sink communists before they could overwhelm Western Europe.

Alas, there will be no Red Storm Rising remake; such trifles do not concern the typical Ubisoft executive. He only has two priorities: 1) making his company's unending succession of open-world outpost-conquering shooters as anodyne and disposable as possible, and 2) making his company's unending succession of scandals disappear from the press. Cool games about military ultratech are simply not on his radar.

Perhaps it is fortunate that I do not hold a cursed monkey paw with which to wish for such a remake, because the French, still apoplectic with insouciant rage from our rejection of their overpriced sub deal, would no doubt flip the script and make Australia the villain. I can picture it now: as an upstanding sub commander of the People's Liberation Army Navy, your mission would be to sink freighter loads of K-Pop CDs, subdue The Renegade Province That Must Not Be Named, and inflict sufficient damage on the hated Imperialists to re-negotiate the cost of Pilbara iron ore to a more reasonable price – say, $0 per tonne.

Meanwhile, in St Petersburg, the code commissars at Wargaming are falling all over themselves to add subs to World of Warships; the game engine has undergone a complete rework to accommodate the new realm of undersea engagements, and it looks fantastic.

Print magazines require long lead times; by the time you read this, WW3 might already be under way. If it isn't, I recommend the superb indie game Cold Waters for all your nuclear sub simulation needs. Though if Lord Humungus is currently raiding your settlement, I'll understand if you have higher priorities than milsim gaming...

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GENXX

STUFF AND NONSENSE

Not mods, though. Only official stuff and nonsense.

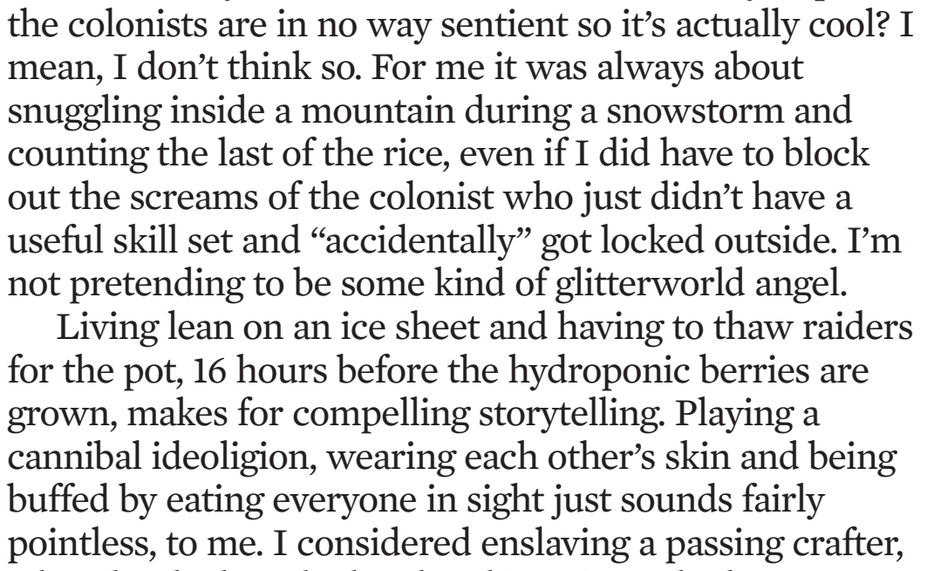
As we have discussed, I have a great love of buying "more stuff" for my favourite games. Case in point? My Sims 4 collection. I can't even remember the name of the latest expansion. I bought it. You can decorate client's houses with poop, and they'll love it, as Carl (of Carl's Guide) demonstrated in his review. I played it once, got a very hard crash and now have a fan constantly wedged between my boobs. So, you've been saved from another column about "more stuff" in The Sims. Today, I am writing about RimWorld Ideology. It makes my laptop less hot.

The problem with "more stuff" in RimWorld is that it makes the game more explicit. For example, I overlooked drugs for the longest time, only occasionally rolling my eyes at prisoners in the throws of withdrawal. They seemed like more trouble than they were worth. Now, you can make a whole drug ideoligion with psychedelic rugs and speakers for loud music. There's a disturbing new item called an "Autobong". Have I invested the many hours I'd need to experience this? No. My 14 year old is pretty curious about drugs and he said he thought it sounded, "boring," too.

But, isn't RimWorld all about "ruthlessness", "edgy fantasies" and making cowboy hats from human leather, like some baby Westworld in which (I sincerely hope) the colonists are in no way sentient so it's actually cool? I mean, I don't think so. For me it was always about snuggling inside a mountain during a snowstorm and counting the last of the rice, even if I did have to block out the screams of the colonist who just didn't have a useful skill set and "accidentally" got locked outside. I'm not pretending to be some kind of glitterworld angel.

Living lean on an ice sheet and having to thaw raiders for the pot, 16 hours before the hydroponic berries are grown, makes for compelling storytelling. Playing a cannibal ideoligion, wearing each other's skin and being buffed by eating everyone in sight just sounds fairly pointless, to me. I considered enslaving a passing crafter, who I bonked on the head and imprisoned when I realised I couldn't craft advanced components, but I didn't have the stomach for it. Cannibalism is one layer of abstraction less distasteful than slavery, to my mind, anyway.

There are no kids in vanilla RimWorld. Your animals can have cute baby animals that will subsequently be eaten by a bear, so why can't I feed a human baby to the bear, as yet? I tried to find out. In a nutshell, the developers have said literally nothing about the game's lack of children. Players have used their non-comments to speculate on everything from whether Tynan is exceptionally moral to exceptionally afraid of criticism. Whether this decision was made from a place of concern, fear, mechanics, or whatever, is irrelevant. The outcome is a statement.



Perhaps a clearer statement is that colonists are strictly either male or female. Before they were romantically interested in each other (resulting in the endless debuffs for rejection and mystifying Gay trait) I never even noticed their gender. When choosing who gets a seat on the escape pod, I avoid both Misogynists and Misandrists like the plague. I'd rather take a Sickly colonist and have to constantly CURE the plague. Colonists who hate each other in an arbitrary manner are no fun. In Ideology there are so many (incredibly specific) ways to piss colonists off, anyway.

There's a tree ideoligion which makes everyone unhappy unless you carefully replant trees and never use wood, unless the wood is produced by dryads. I had two ideoligions in one colony who hated both cutting trees and mining stone. Were they OK with sleeping outdoors? No, they were not. They also kept trying to convert each other and fighting. I will admit to (almost) enjoying the challenge presented by ideologically opposed groups, if not most of the tree stuff. There's so much to do now but, oddly, most of it I just don't want to experiment with at all.

I love RimWorld and have played it for many thousands of hours, but it's getting confusing to know how to recommend it. When people ask what I'm playing I say, "Rimworld. It's so great, but possibly offensive and political in a way that goes entirely over my head." The "more stuff" that gets added to it, the more statements it makes. I just want to buy expansions in a way that doesn't either break my PC or make me feel a bit icky. And, no, I don't want "sensitive old lady" mods, thanks very much. Ideology broke enough of the game without that. PC

Meghann O'Neill spent a good 30 minutes trying to figure out how to spell "ideoligion", then another 30 wondering whether the word "ideologically" should be "ideoligious."

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Special Report

PCPP INVESTIGATES

HOE TO HOE

How STARDEW VALLEY went from cosy to competitive.

One of the most wonderful things about the evolution of esports is that these days, any game can be a contest. Long gone are the days where ultra-competitive ventures like *Dota 2* or *Counter-Strike* were the only ways to enjoy high-level gaming. This was evident when at the beginning of August, *Stardew Valley* creator Eric Barone announced the first-ever Stardew Valley Cup – a tournament that would pit four teams against each other for a US $40,000 prize pot, donated by Barone himself.

The objective was to take on 100 challenges within three hours and to try to complete as many as possible, with each challenge offering a different number of points depending on its difficulty. Small things like naming a chicken after Barone would net a team ten points, while more difficult tasks like getting to the 100th floor in the game's gruelling Skull Caverns granted 25 points. The challenges, as well as the Cup itself, were created by popular *Stardew Valley* content creator Zach Hartman.

"I really wanted to make sure the challenges were high quality, since I knew they would have a huge influence on how well the competition would turn out," Hartman said. "I wanted them to force the competitors to play in a way they never had before, while still rewarding the skills necessary to be a good speedrunner." Hartman also co-hosted the event with Barone, having previously streamed together earlier this year.

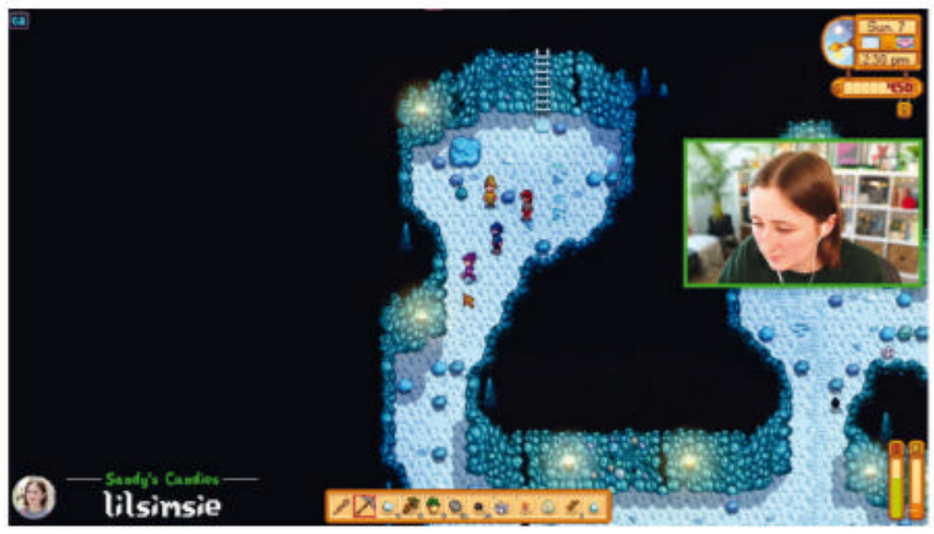
"Eric and I connected for the first time in May after I reached out to him by email," he said. "He agreed to be on my stream in June, and during that stream, as well as the Cup, everyone was super excited to get to see him. He has always made every decision based on what will bring the most joy to his community, and the relationship he has developed with the *Stardew Valley* fan base is evident."

The Cup had 16 competitors in total – four for each team – being a spread of some of *Stardew Valley*'s most dedicated content creators. Some streamers like TheHaboo and cordite89 were already well-versed in the intricacies of *Stardew Valley* speedrunning, while others like Fuzzireno had never delved into the game's more competitive side.

"It's been both a fun and exciting experience but also nerve-wracking at the same time," she

Barone's beach

All teams played on a beach farm, and in a nice nod also used the same seed as the one for Eric Barone's recent co-op farm, which he completed in just over 12 months with some friends as a way to "stay in touch during a strange year". Here it is if you fancy using it yourself: 243749714. Happy farming!



MAIN: Barone announced he's working on a new game – similar to *Stardew*, but not farming.

LEFT: Speedy dungeon crawling was a potential source of extra points.

ALTERNATIVE AGRICULTURE *The Cup featured several strange secret challenges*

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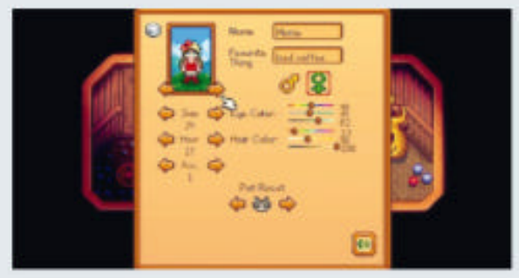


GET A NEW LOOK
Befriend the wizard and he'll allow you to change your appearance whenever you please. What sort of w... oh, wait.

told Hartman and Barone before the event. "As a casual person, I'd be like 'but this day, I could be doing something with it,' or 'animation cancelling, how is that gonna save time?'"

The roster also saw the likes of SeanieDew, who has gone viral on TikTok a few times for his cosplay of Harvey, one of the game's marriage candidates. Animated comedy sketch artist Matthew McCleskey was another competitor, having never streamed on Twitch prior to the Stardew Valley Cup.

"It was such a huge learning experience since I had only ever played *Stardew* casually before the Cup. My teammates taught me a lot about strategy, animation cancelling, and speedrunning techniques," McCleskey said. "Overall it was a super high-stress time, but it was some of the most fun I've had."

Each team had around two weeks to practice, prepare and strategise prior to the tournament. "I ended up asking them how many hours they've all done in preparation for the event," Hartman told Barone on-stream. "The total was over 700 hours of practice in the last two weeks for this event."

"MY TEAMMATES TAUGHT ME A LOT ABOUT STRATEGY AND SPEEDRUNNING."

STOP START

The dedication and hours of practice are apparent once the tournament kicks off. The techniques that McCleskey mentioned are present amongst nearly every competitor. It's strange seeing just how many ways you can streamline a game that, traditionally, feels more planted in relaxing and peaceful vibes. Seeing the animation cancelling in action is mighty impressive – it's become a common speedrunning tactic, one that arose from Barone's own forgetfulness. "When I made *Stardew Valley*, I added in this little combination of keys that causes whatever animation your character is doing to stop immediately," he explained. "I just put it in for debug reasons... and then I forgot to take it out."

Other interesting, non-speedrunning strategies also get utilised throughout by each team. Some are making use of dedicated fishers for perks like money and completing some of the angling challenges. Team Sandy's Candies opt to colour code their characters so they're more easily identifiable, assigning each member a role.

The method seems to work for Sandy's Candies, who pull through with a surprise last-minute points banking. They come away with 611 points, followed by Pierree's Cherries at 597 points. Pam's Yams come in third, with Krobus' Crocuses taking fourth place.

The thing that's been apparent throughout all of this is just how much fun everybody is having, from the competitors to Barone himself. When Sandy's Candies are declared the winner, every member erupts into cheers. It's clear how much both the game's community and creator sincerely care about what *Stardew Valley* has grown into.

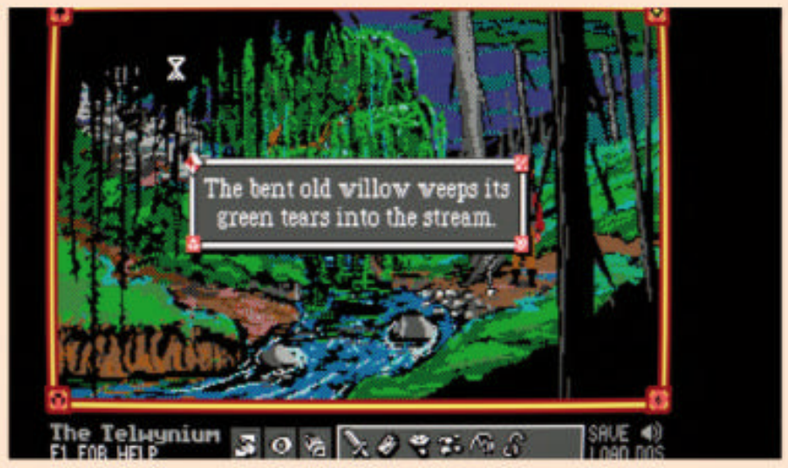
"It's really cool to be able to do something like this and that there's so many people would be interested in this little, scrappy, indie farming game that I made," Barone concluded towards the end of the stream. His active involvement with the community never goes unnoticed, and Hartman feels is a big reason something like this could even be possible. "The *Stardew Valley* Cup could not have happened without the continued support and grace of Eric, the competitors, and the community," he said. "I am incredibly grateful that I was able to be a part of *Stardew Valley*'s history, and I am very excited to see what the future holds!" ■

Mollie Taylor

A collection aside

A COLLECTION ASIDE

With Sydney forced back into rather a long lockdown (only recently ended! -*Ed*), MEGHANN O'NEILL has been grumpy, which has had the unexpected consequence of this collection being a little more diverse than usual. She certainly enjoyed all of these games, she just didn't have the patience for longer times spent engaging within a single genre. If you find you want to flit agitatedly between horror and stealth, adventure and puzzles, all of these games are a great choice. Oh, and she totally had to cancel her snow holiday, so there's a game for that, too.



Khrrok Ar'Dwinn
The earth has healing in it, I know of it. I could mix a salve, that will aid with his fever.
The Telwynium
F1 FOR HELP
SAVE
LOAD DOS

THE TELWYNIUM: BOOK ONE

DEVELOPER Powerhoof **PRICE** Name your own price
AVAILABILITY Released **WEBSITE** https://powerhoof.itch.io/the-telwynium

My very first impression of The Telwynium: Book One was, "Aah, my eyes." But I had computers in the 80s, they can't scare me. Dave Lloyd, of Powerhoof, says, "The aesthetic is Sierra's SCI-0 engine, EGA with dithering." No kidding! It's like Conquests of Camelot and the early Quest for Glory games. The next thing I noticed was that ambient forest sounds are panned, creatively, left and right. It's weird to be transported (perfectly) to a bygone era by one aspect, yet removed from it by another. There are more such dissonances, but I quickly grew to love them all.

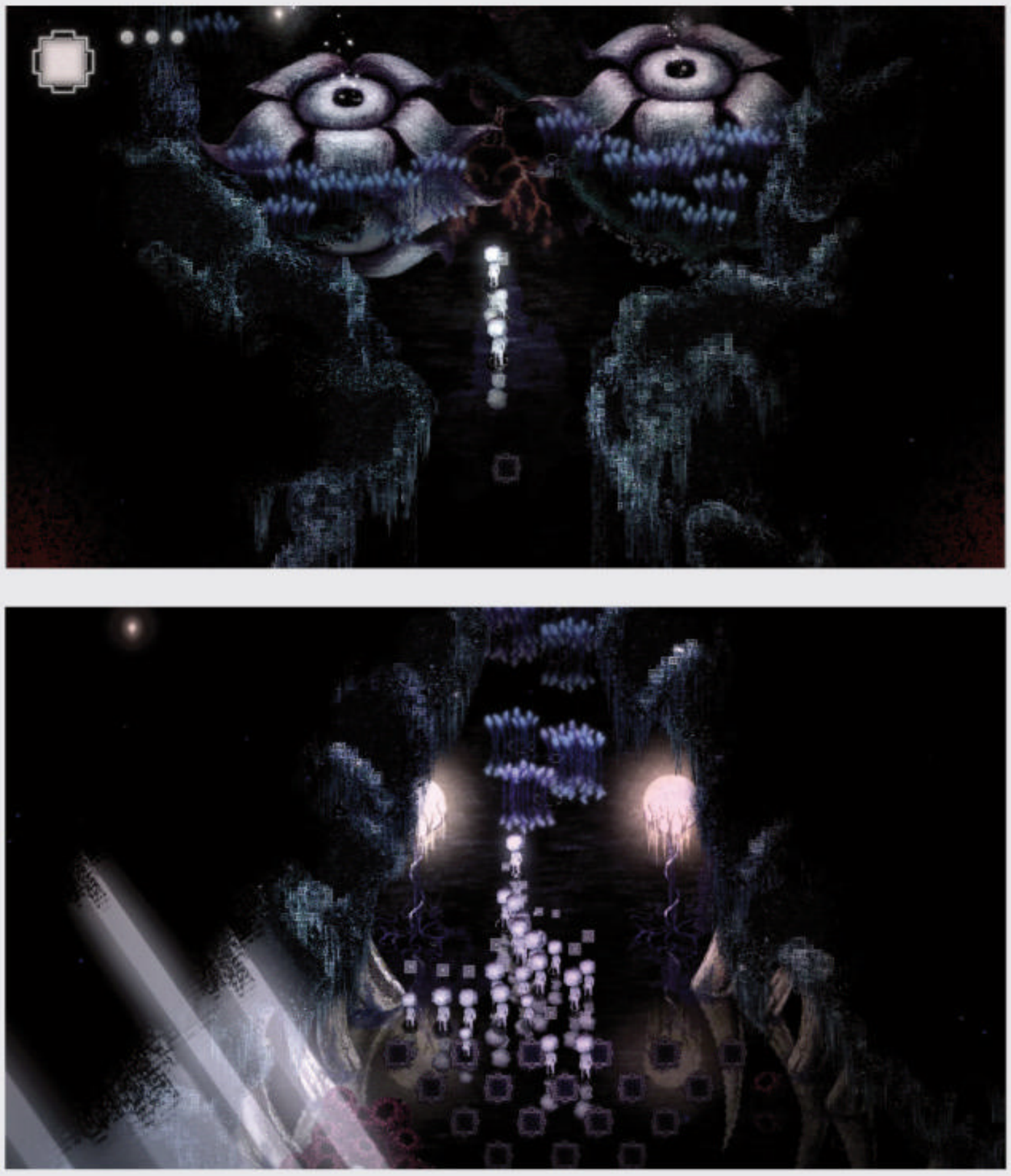
If I tried to explain to my kids why games like King's Quest were so immersive for me, as a child, they would think I'd gone silly. I'm not sure I trust even my own memories of entire gobsmacked weekends spent as a princess in Daventry. I play these games again, from time to time and they tend to be objectively unpolished, in places. The whole "twist" in KQ3 was pretty wonderful, but was it actually "well written" overall? And the stairs? Falling to my death over and over, because I'd misjudged Manannan's return, surely wasn't as fun as Stair Quest, 25 years later.

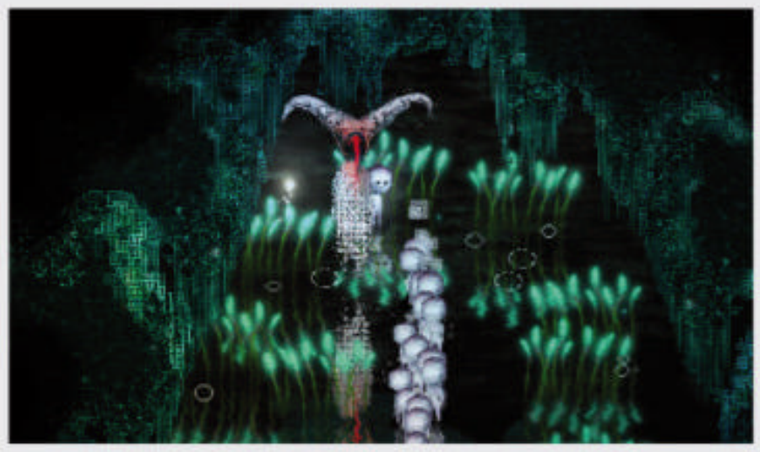
Lots of modern retrogames place rose-tinted glasses onto your face. For example, Thimbleweed Park looks a lot nicer than Maniac Mansion. Telwynium, instead, tells a story that's nicer than most everything I remember. Although the entire hour of play occurs on a small handful of forest scenes, I found myself imagining a richly detailed world. Who are The Shadowfell? What was The Stillness? How do Body, Breath and Soul create life? And why is there a gigantic golem, born from earth and stone, sleeping peacefully, while I keep watch by the dwindling campfire?

Pen, the protagonist, reveals his feelings for these eclectic characters, recalling recent affairs and the destruction of their village. As you complete objectives, like finding wood for the fire, the story moves on. Having now created a couple of tiny games with PowerQuest myself, it's cool to understand how events are triggered; as puzzles are solved, or as you explore. There's murder, kidnapping, betrayal, and secrets to uncover. The ending sequence was surprisingly evocative, including a cliffhanger that made me absolutely desperate to play the next chapter.

The puzzles are engaging and involve finding, combining, and using items, as well as listening carefully to dialogue and already knowing a few things about bees. I disliked one moment where I understood the problem I had to solve, but was unable to find what I'd guessed were the required items, until the story moved forward. But, it's probably amazing that I can still be enchanted by an elegant sequence of puzzles in an adventure game. Surely the magic happens when you suddenly know something will work, before you've even tried it. I love that.

I've loved all of the Powerhoof games I've played. I've also loved the games made from the PowerQuest asset pack. And I love modern retrogames. But I do think many will appreciate Telwynium as much as I do, just based on the strength of its story. "Name your own price" is a difficult price to be disappointed with, too, especially for such an immersive experience. I've probably gotten used to playing adventure games as if they're merely a cute reminder of the past, so it's nice to be looking forward to a sequel, for a change.





DAP

DEVELOPER Melting Parrot **PRICE** $19.95 **AVAILABILITY** Released **WEBSITE** https://store.steampowered.com/app/1372210/Dap/

I've learned a few things about daps over the past twelve hours or so. Firstly, they exist in the void of space, in an eternal, spermatozoon form. Then they're summoned (with fire) from a big, ugly flower, and mature with a neat little pop.You have to introduce yourself to them before they'll follow you, but they're loyal, unless they wander into corrupted areas and then they'll suddenly become very murderous indeed. I don't want to tell you too much about these fascinating creatures because discovering them is a pivotal part of the experience.

I'd generally expect a horror game to have an explicit story. Most of the characters in Dap simply say "dap" (although there is occasional dialogue from higher beings). Instead, the player's engagement with the horror aspect unfolds entirely through gameplay. All manner of unfamiliar creatures lurk in the dark. I often know how these unnamed beasts sound, before I know what they look like, what they do, or how to counter them. It reminds me of Duskers, where your best laid plans can go to hell in seconds and you may have no idea what even happened.

Indeed, I've found myself using my ears obsessively. Sound provides so much information, from an ominously cheerful ping when you've overcharged your daps with magic and they're about to pop, to percussion layers fading into composition when you're about to be completely overwhelmed by waves of celery string monsters. I trust that the more "pleasant" musical dissonances mean I'm safe to explore, whereas a seamless transition to a "harsher" textural arrangement means I should proceed with extreme caution.

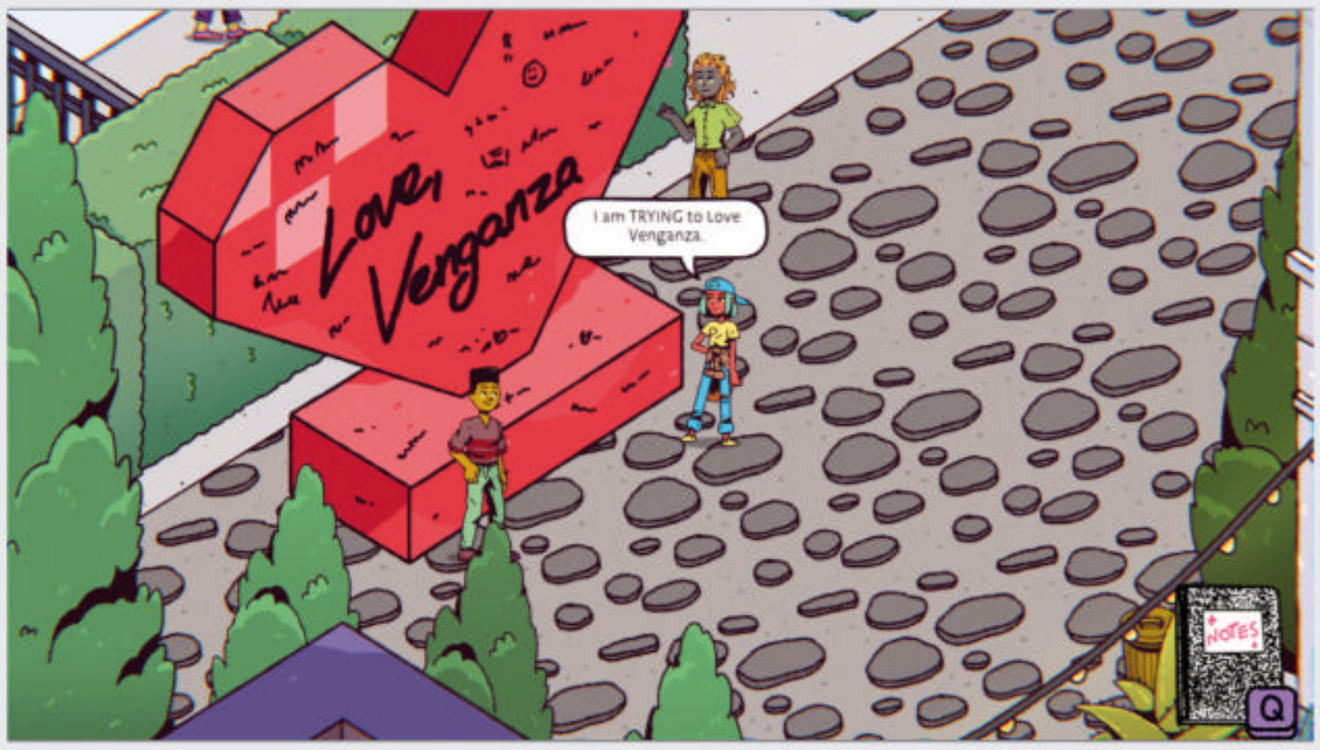
There's an element of rhythm to combat, too, with attacks often occurring after a measured, aural sting. It's certainly easier to hear when to dodge than to react to visual cues, especially when watery levels create (deliberately) confusing reflections. I found a lot of Dap very challenging, which is OK, except for a few places where I thought failure could have been supported more thoughtfully. I played one area nearly 100 times because I was locked in with no way to craft health potions and to find burnables, to ward off corruption.

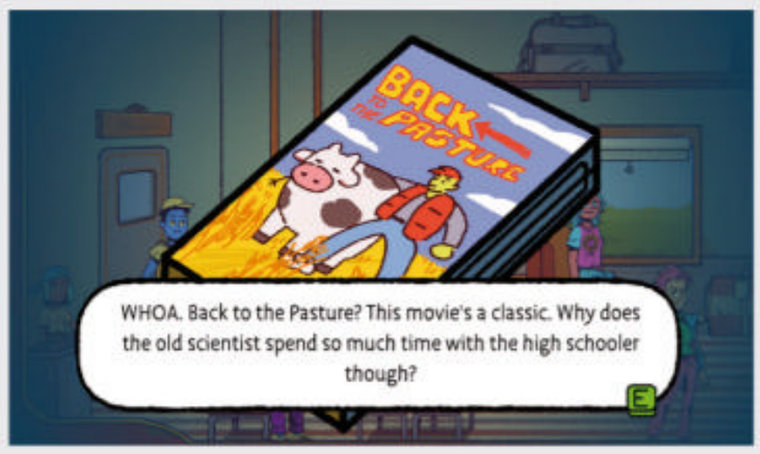
Conversely, there's another area where the game is saved before you craft potions (so you definitely have them), but this takes more than a minute each time. The ensuing battle can kill you in a few seconds, meaning that there's far more "busywork" than "trying again". I have a great love of being murdered unexpectedly in Dap, less so when I have to pay my 11-year-old to chop mushrooms, then man the potion button. Indeed, the interface requires many fingers. (We've broken two gamepads this lockdown, so I played with keyboard and mouse.)

Maybe I'm bad at games. Maybe THAT'S why I review so many point and click adventures! (Nah, I love story driven genres.) But, it's interesting that I'd consider Dap (with its lack of explicit story) as my "game of the year" so far. I find myself instantly forgiving moments of frustration when I'm back to creeping through the exquisitely beautiful forest or tending my dap-sperm garden in space. It's an intense (and oddly emotional) experience and an absolute treat for the ears in every way. Listen for when to tread carefully and for when to run.

A collection aside

I have a customer here right now who wants to know the name of that movie where the girl keeps a big secret from her mother and then has to travel the country without her mom finding out.
E




BACK TO THE PASTURE
WHOA. Back to the Pasture? This movie's a classic. Why does the old scientist spend so much time with the high schooler though?
E

THE BIG CON

DEVELOPER Mighty Yell **PRICE** $21.50 **AVAILABILITY** Released **WEBSITE** https://www.mightyyell.com/

Did my trombone and I make it safely to band camp? No, we did not. I'm on a crime spree and I have no idea where my trombone even is. The Big Con is a kind of stealth game. Certainly, there's an abundance of wallets to pickpocket. I can eavesdrop, for the purpose of swindling, too. My teenage grifting is all for a good cause, of course. Mum is being hassled by thugs. She needs $97,000 in order to save her video store. It's the 90s. My dream is to grow up and work in this (obviously timeless) institution forever, not to go to a stupid music school.

The humour is intense. I'm always laughing at either an adventure game joke, like why I have an ice cream cone in my fanny pack, or a 90s joke, like the designer fanny pack shop. One payphone conversation I had with Mum absolutely cracked me up (as we used to say in the 90s) because I was convinced that she'd finally figured out that I was not safely at camp, but she had not. Her faith in me is boundless and you can roleplay what is actually a very sweet familial relationship, with most conversations offering branching choices.

Failure is also hilarious. If you get caught picking pockets three times, in the tutorial (when you're still in your hometown), Mum makes you rewind videos (by holding E), as punishment. If you're caught stealing (at least a few thousand dollars) from wallets in Las Venganza, you're not arrested, you'll take yourself shamefully to the local video store to rewind videos. People will also be alerted to your scheming if you do a bad job of figuring out how to scam them. In fact, I'd say that failable quests is what distinguishes this from a more classic adventure game experience.

Although larger puzzles still have to be solved, even if it's just raising an amount of money, there's a tremendous amount of optional content. I left a tiny girl screaming at her (cashed up) dad because I couldn't figure out how to steal a Golden Burblo from a toyshop. And, as on any good road trip, you'll keep running into the same people, all of whom have problems to progressively solve. I found myself seeking out everyone from the chain smoker to the bad comedian, and it's cool to see how my interactions changed their stories.

I definitely noticed how music was implemented, too. As you enter a location, a new arrangement of the loop transitions, at current time. So, you're hearing cheesy pop, in the mall, which switches out for a rock version of the same song, in the flanny shop, Plaid to the Bone. Now (nearly) at the end of the game, I'm singing along to the musical themes, as performed by a dramatic pianist, to match the emotional climax. I still need to know how much trouble I'm in with Mum and how another, almost incidental (but so important), relationship will end.

I wish The Big Con was released when I was a teenager. The jokes only work in a nostalgic context, and I would've rolled my eyes at the mini games, but still. It's like The Adventures of Willy Beamish, only a lot more fluoro. Why does a cool ghost (with no feet, but a skateboard) seem like the perfect choice for an in-game hint system? I'm too old to remember, but not too old to appreciate a nod to whoever Rad Ghost is meant to reference. Wasn't there a Rad Ghost in Undertale? At some point all of the stolen wallets and modern retrogames become one.

APC's historic 500th issue is onsale November 1st.

Grab your copy from any good newsagent,
or online via **apcmag.com**

A collection aside

MINI MOTORWAYS

DEVELOPER Dinosaur Polo Club **PRICE** $14.50
AVAILABILITY Released **WEBSITE** https://dinopoloclub.com/games/mini-motorways/

Mini Motorways is a game about the dysfunctional relationship between town planners. Why would anyone allocate land to a store selling pink pins, over here, when all the pink shoppers are over there? I place superfluous roads just to force the guy in housing to work in a straight line. Even then, I have to violently rotate (presumably occupied) dwellings to a more optimal orientation. I can't help but think all of this angst could have been solved with a simple council meeting to agree on some basic logistics. It's very passive aggressive.

In my review of Dinosaur Polo Club's previous title, Mini Metro, I noted that it evoked train simulators, like Railroad Tycoon, for me. Mini Motorways is (more explicitly) a puzzle that needs to be solved. It's like Rip Them Off, by Lozange Labs, rather than SimCity. I was excited to achieve a score of 2004 (trips made) after a few hours. Then I noticed that world records are nearly 200,000. What?! A quick search reveals underhand tactics, like blocking any 3x6 area (the size of a spawning shop) with two road tiles and leaving houses completely isolated.

What kind of a "road guy" would I be if families with cars couldn't drive out of their driveways? I do have to admit to being curious about rumours of a "steady state" in which cars complete their journeys without the town developing, where inconveniently placed roads reign supreme. Indeed, screenshots of 100,000+ scores show structures that remain relatively small. These towns look orderly in some ways and like a bureaucratic nightmare in others. Let's be clear, I love Mini Motorways, I just want to play in a way that makes sense, not as the office asshole.

WHERE THE SNOW SETTLES

DEVELOPER Myriad Games Studio **PRICE** $15.95
AVAILABILITY Released **WEBSITE** https://wherethesnowsettles.com/

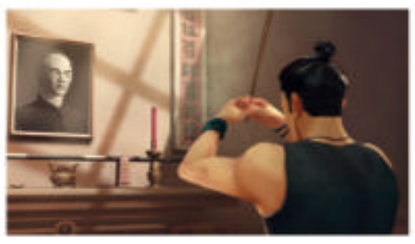
Every time I go to a game jam, someone shows me their snow game. I think developers just really like to experiment with snow; making character animations for being waist deep in snow, leaving tracks in the snow, tracks being covered over by fresh snow. I get it. Where the Snow Settles is a celebration of snow. If I have one criticism it's that the fixed camera won't allow me to look at the gorgeous levels in more detail. Oh, and there's a short, but lovely, story that includes the relationship between sisters, wary spirits, and a world that is getting ever colder.

Apart from dialogue, there's not a lot to interact with, which is why I noticed the music system, up front. Each time text appears, you hear a short, musical phrase with tone colours matched to character. This was created by a Tasmanian team, so I asked for an interview, to learn more. Composer, Adam Scott-McGuinness, says, "Esta is a strong character so we wanted the timbre to have a fast attack but also sound feminine. After considering a lot of instruments, we settled on the koto. Aurelia's uncertainty and lack of confidence was more of a soft piano."

I was excited to have guessed most of the musical implementation correctly, from randomly triggered F lydian stings for more positive story moments, to the sparse textural backgrounds over which complex harmonic or melodic stems could be added during cutscenes. Scott-McGuinness says he wanted the game to be aurally immersive and to "sound amazing". It does. I'd recommend Where the Snow Settles if you have an interest in one of two things; snow levels in games, or elegant, systemic composition that doesn't sacrifice detail for reactivity.

The source for tech buying advice

techradar.com



NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
February 22, 2022	Sloclap	In-house	sifugame.com

SIFU

How to win fights and intimidate people

Kung fu brawler *Sifu* is about "mastery through practice", and after watching a gameplay demonstration, I can confirm that beating up an entire apartment building like Iko Uwais is going to take more than button mashing. But make too many mistakes on this singleplayer revenge journey, and you'll age into dust before gaining satisfaction.

Sifu looks and sounds similar to *Absolver*, developer Sloclap's previous game – those *thwap thwap thwap* hit effects are still super satisfying – but its fighting system isn't a copy. *Absolver*'s combat involved a cool moveset customisation menu where players could mix-and-match combat styles and build combos that flowed between stances, and *Sifu* doesn't have an equivalent. All of *Sifu*'s moves are inspired by Pak Mei Kung Fu, which its creative director personally practices.

Sifu does include "over 150 attacks" to work with, though, and a lot of the moves will be unlocked as you play through the campaign. A few of the skills I saw were Pushback Cancel, which introduces a way to negate shoves, Crooked Foot, which adds the option to perform a throw after a successful parry, and Rush Slide Kick, which is what it sounds like. I'll miss *Absolver*'s drunken-style Stagger combos, which I doubt the real-life Pak Mei school endorses, but it looks like we'll still have the opportunity to develop a personal fighting style in *Sifu*.

SIFU'S MOVES ARE INSPIRED BY PAK MEI KUNG FU, WHICH ITS CREATIVE DIRECTOR PRACTICES

SIFU DIET

Also like *Absolver*, you won't have to use your thumb to shine your controller's d-pad with endless *Street Fighter* quarter-circles; the 'mastery' here isn't mastery of complex input patterns. Mapped to an Xbox controller, two of the 'base combos' I saw in the menu went X, X, X, X and X, X, Y, as examples. *Sifu* will support mouse and keyboard play with remappable controls, executive producer Pierre Tarno confirmed. (I think I'll go with a controller myself.)

I imagine there'll be at least a little sweating over input memorisation, but the demonstration I saw focused on timing, forethought, movement, and crowd control. There are just two attack buttons, light and heavy. The other two controller face buttons are bound to 'pick up weapon' and interact/vault. It's more than vaulting, really: at one point the protagonist scurried up a wall, escaping from a group of fighters.

Another way to deal with multiple enemies is to take advantage of each combo's 'tactical opportunities' such as knockdown, pushback and stun effects.

NEW INFO

During a combo, you can bounce between opponents without breaking the chain of attacks, moving on from enemies you've stunned and then coming back to them when they regain consciousness.

On defence, the right trigger is bound to dodge, while the left trigger parries attacks when timed correctly, or can be held down to block incoming attacks until a meter fills and your guard is broken.

Sifu reminds me most of *Absolver* when an incoming strike is evaded and turns into wind. My hope is that finesse feels even better in *Sifu* where there are no networking or PvP balance concerns to get in the way of whatever feels right. As just an observer right now, I love the way the protagonist leaves ghost trails as he slips and rolls under and around punches and kicks; it's not one repeated animation.

When you fill an enemy's guard meter, an on-screen prompt displays which two buttons to press to perform a finishing takedown, which restores a little of your health (and empties theirs). It's nothing surprising, although the moves look great. *Sifu* did surprise me, however, whenever the protagonist threw an enemy into a wall

Sifu

or over a railing. I didn't catch much in the way of obvious animation cheating – slippy-slidey footwork, sudden camera changes – to bring level geometry into the fight like that. It generates the kung fu movie choreography feeling Sloclap is going for and makes it look effortless.

During the demonstration, for example, the protagonist finished an opponent by kicking him in the knee and dropping him into a kneel at the foot of a metal bed frame, and then kicking him again in the back, smashing his forehead into the bars – without it going through the bars or otherwise looking ridiculous. Sometimes enemies who witness your badassery will even give up and cower, allowing you to interrogate them.

Sloclap's inspirations come from all kinds of martial arts movies, but the name I've heard most often is Jackie Chan. I'm not sure a videogame has ever really captured the way Chan so efficiently and comically frustrates multiple opponents with props. If *Sifu* can stick the landing on that slapstick, it could truly be great.

DUEL CITIZENSHIP

It'll definitely be hard. Like in *Absolver*, enemies have the same kinds of abilities you do, so your best tricks will be thrown back at you. Hopefully they feel clever enough that we won't end up wishing *Sifu* had a PvP mode like *Absolver*. The player in the demonstration I saw never died, but Tarno says that's just because they're good at the game. Failure is expected.

When you 'die' in *Sifu*, the protagonist is resurrected, but they come back a bit older than they were before. As they age, their health decreases, but their blows start to deal more damage. The idea is that they're becoming an 'old master' whose technique is more precise, but whose body can't take as many blows. Get too old, and it's game over.

That's meant to happen: *Sifu* is the sort of game you're expected to play across multiple runs, and with some effort it'll be possible to unlock abilities permanently, so that they're available at the start of new runs.

Tarno isn't sure where the studio will land on difficulty settings. They're still honing the default level of challenge, he says, and while modifiers are on the table, he doesn't feel that a mode with a "very low level of challenge" would be in keeping with *Sifu*'s theme: mastery through practice. Failure and repetition are part of how *Sifu* tells its revenge story. It'd be nice to see some 'break glass in emergency' options, though, just in case players get impossibly stuck due to unforeseen combinations of variables.

We've seen some cool-looking scenes so far, particularly in the nightclub, but I'm hoping that Sloclap is saving its best levels for release. Rather than dramatic, the apartment level inspired by Old Boy looks washed out in the studio's signature planes of pale colours. It's a little boring, and I'm not sure it helps that during a hallway fight, the camera switches to a side perspective to make the Old Boy homage unambiguous. It's cute, but isn't it more fun to notice subtle references?

FILM STUDIES

There'll be other overt movie nods in *Sifu*, but Tarno says you're not going to be barraged with them. That's probably for the best, although if there happens to be a clever reference to the original Drunken Master, I'm sure I'll turn around and declare that references are cool, actually.

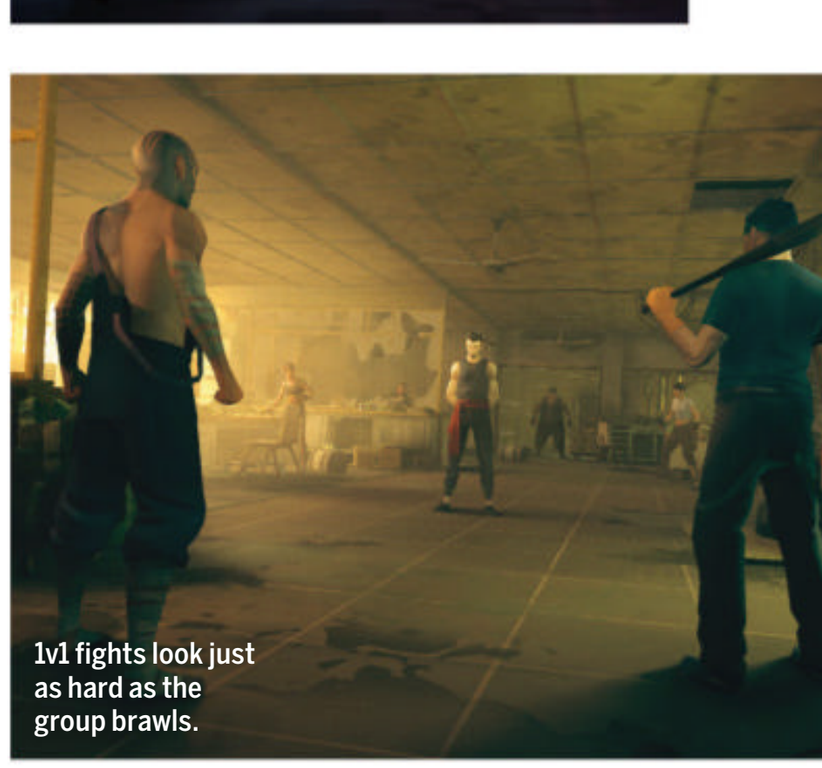
In the demonstration, Sloclap also showed off a museum level which invites the player to use priceless artwork as weapons. I'm happy to accept that invitation, but the plain, slate grey museum walls weren't used to any interesting effect that I saw. I wanted exaggerated blood sprays to pop off that neutral ground, or for art pieces to shatter, or maybe for it to go all the way into the minimalism of *Ape Out*, or back to the strangeness of *Absolver* and its masks.

Tarno did hint that there are surreal scenes in *Sifu* that we haven't seen yet, so that's a good sign. I also have to mention that the museum contains a room with a giant swinging pendulum that knocks people on their asses – also good.

Seeing roughly how *Sifu*'s kung fu will interface with my thumbs hasn't changed my positive outlook for it, but it did confirm some assumptions and raise some new questions. Will the story take us beyond apartment buildings and nightclubs? How many ways are there to slam someone's head into an object? Are there any ladders, and can you humorously place them over someone and then punch their face through the rungs like Jackie Chan?

Tyler Wilde

TARNO ISN'T SURE WHERE THE STUDIO WILL LAND ON DIFFICULTY SETTINGS

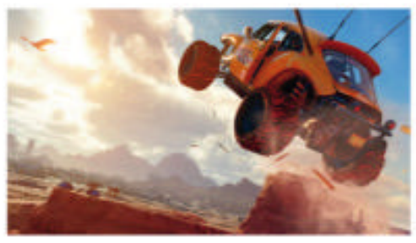


1v1 fights look just as hard as the group brawls.

ABOVE: *Max Payne* moves are still cool when dodging bats instead of bullets.

LEFT: I bet that heavy punching bag comes into play during this fight.

Saints Row



NEED TO KNOW

RELEASE
February 25, 2022

DEVELOPER
Volition

PUBLISHER
Deep Silver

LINK
saintsrow.com

SAINTS ROW

The ultimate crime fantasy is getting a reboot next year.

S*aints Row* is getting a complete reboot, and it's just called... *Saints Row*. All those wacky antics from the four previous games, like diving into computers, killing zombies for Burt Reynolds, becoming president, and ruling the world with superpowers? None of that happened in *Saints Row*'s new American southwest-inspired world, Santo Ileso.

This time around, the Saints crew is a close-knit group of four young friends, each with their own expertise: planner and business mind Eli, expert driver Neenah, DJ and smooth talker Kevin, and the slightly off-the-rails Boss (that's you). As the Boss, you can still create a completely custom character that's big or small, young or old, and anywhere in between.

FIRST LOOK

Interestingly, *Saints Row* won't have an expanding cast of characters that join the core Saints crew over time. You will recruit additional nameless underlings as you expand your criminal empire with new businesses, but the story centres around the four core Saints founders. Volition talks about the burgeoning crew – a quartet that's tired of working for big criminal organisations that decide to start their own thing – more like a startup company than a gang. I guess that means your mission is to 'disrupt' crime?

The new crew seems like a spirited bunch. Their appetite for chaos is reminiscent of the old gang in the best ways, but I detect less meanness and cynicism this time around. I'm more excited about Santo Ileso itself, which looks like a truncated version of Las Vegas' desert region. Creative director Briant Traficante says Santo Ileso is "one of the largest cities we've built for a *Saints Row* game". How big is "largest" exactly? Volition didn't say, but there will be nine distinct districts across the map.

THEIR APPETITE FOR CHAOS IS REMINISCENT OF THE OLD GANG IN THE BEST WAYS

GANG LAND

It's great to see *Saints Row* expand out from a single city-sized sandbox. One of *GTAV*'s greatest strengths is its world that's just as fun to drag race in as it is to jump motorcycles off huge dirt hills. I hope Santo Ileso can achieve similar highs, but don't expect a similar player count. Like every *Saints* game before it, *Saints Row* caps out at two-player co-op.

As you grow the new Saints crew, vacant lots across Santo Ileso can be purchased and turned into businesses. Volition showed off a few examples, including a food truck dispatch that also peddles drugs, arms dealers, car repo shops, nightclubs, and laundromats. I got the sense that these optional businesses will rake in extra money automatically.

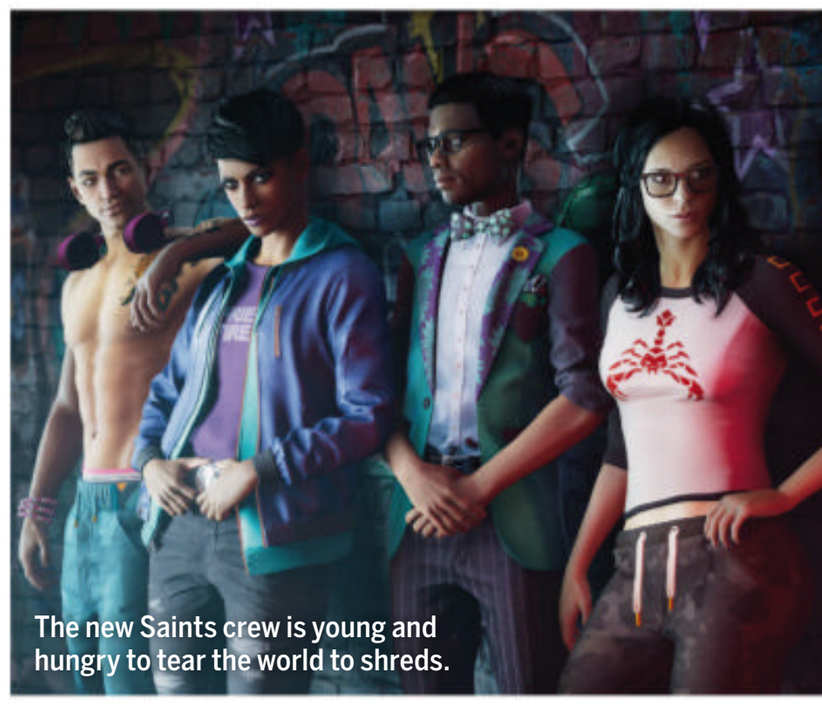
Volition confirmed that some side activities from past games will make a return through opening businesses, like the popular ragdoll punishment minigame Insurance Fraud.

Without getting specific about the series' edgy humour from past *Saints Row* games, studio development director Jim Boone says the *Saints Row* reboot will bring the series into the 2020s. "We love [the old *Saints Row* games], but we also recognise those are games of a time," he said. "They made sense within that era, and we were able to do things that felt good back then. But that tone is not something that we feel like we want to do today. We had a different kind of story that we wanted to tell."

A new main cast and city certainly freshen things up a bit, but as a whole, *Saints Row* seems very similar to the games before it. Volition promises that the shooting is still arcady, driving is better than ever, and the weapon choice is vast.

We'll check on those claims once we can play it, which is sooner than you might expect. *Saints Row* is launching February 25, 2022 on the Epic Games Store.

Morgan Park



The new Saints crew is young and hungry to tear the world to shreds.

ABOVE: Volition says Fast and Furious is a major inspiration for *Saints Row*.

LEFT: *Saints Row*'s combat will still be fast and breezy, according to devs.

Alter ego

ALTER EGO

How tackling the Marvel universe revealed an unexpected new side of the XCOM team.

By Alex Spencer

Alter ego

Game Marvel's Midnight Suns
Developer Firaxis Games
Publisher 2K
Release March, 2002

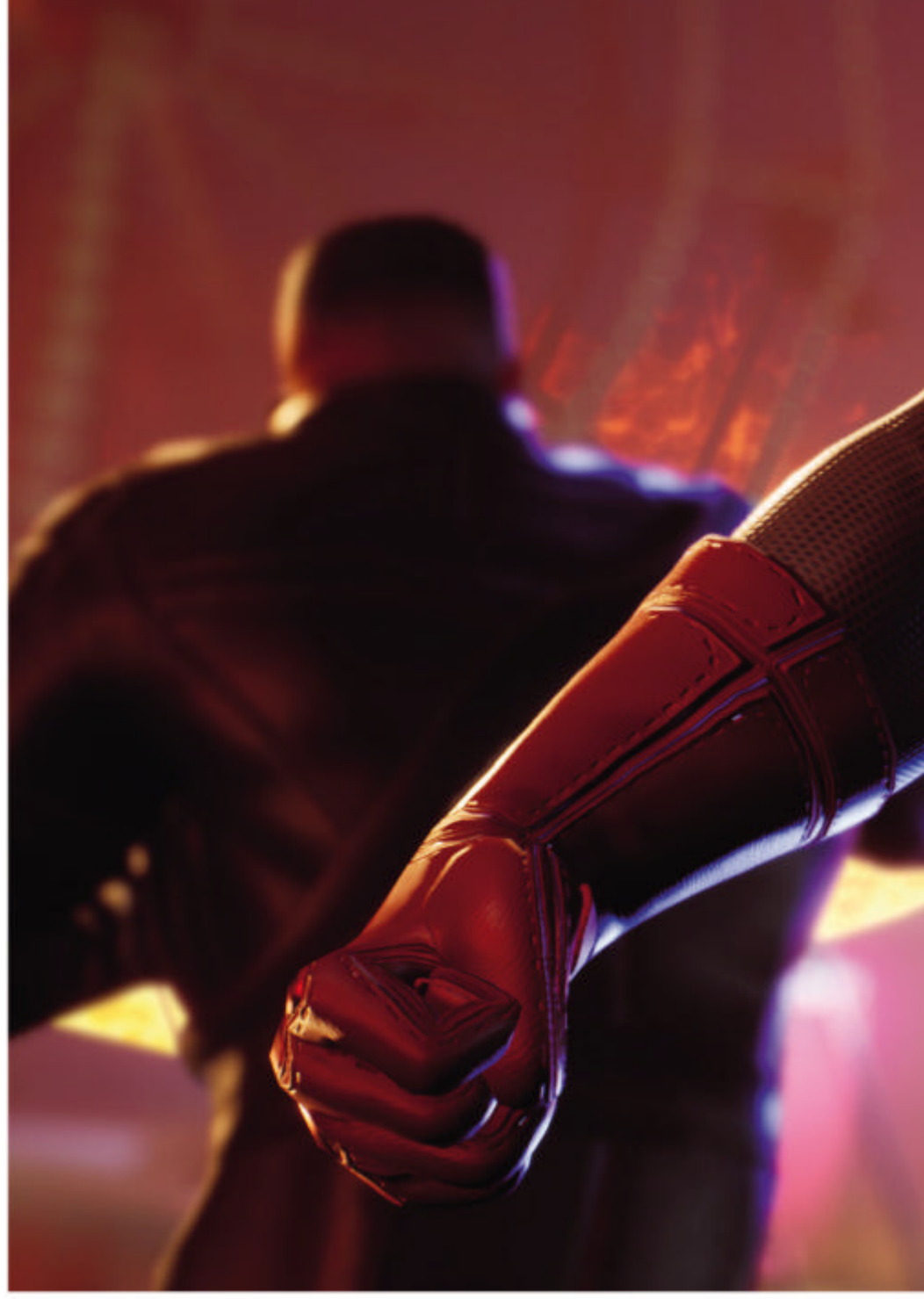
Rumours of a Firaxis Games Marvel title have been circulating since June. Long enough, no doubt, for us all to build up a mental picture of what the XCOM team would do with this licence. Whatever version has been living in your head these past few months, though, know this: Marvel's Midnight Suns is not that game.

Rather than the XCOM reskin we might have anticipated, Firaxis has created a game that has as much in common with Slay The Spire and Persona as it does with the studio's previous releases, one that borrows equally from fighting and dating games, and periodically ditches its trademark turn-based approach for realtime adventuring. But the surprises begin before any of that – right from the first time we see the game's title.

By this point, Marvel might well be the single most profitable word in the English language. The two that follow it, though? They represent one hell of a deep cut. The game is a loose adaptation of Rise Of The Midnight Sons, a 1992 crossover event which launched such titles as Nightstalkers, Spirits Of Vengeance and Darkhold: Pages From The Book Of Sins. A part of comics history, it's fair to say, that is not especially well-remembered. Except in the two cases that matter here: self-described "Marvel super-fans" **Jake Solomon** and **Chad Rocco**, now creative director and director of narrative on Midnight Suns.

The pair grew up on the publisher's monthly . ▶

FIRAXIS'S GAME HAS AS MUCH IN COMMON WITH SLAY THE SPIRE AND PERSONA AS IT DOES WITH THE STUDIO'S PREVIOUS RELEASES



Lilith's demonic army, the Lilin, gives Firaxis a chance to wheel out some *XCOM*-like enemy designs. They are joined by the Fallen, corrupted versions of familiar heroes and villains.

ABOVE **Some missions will demand a certain character is included in your party, to ensure players can't just stick with their favourites.** LEFT **Blade was one of the stars of the '90s comic series that inspired the dev team.**

Jake Solomon, creative director

"MARVEL IS JUST EVERYWHERE. YOU REALLY HAVE TO FIND A CORNER OF THIS UNIVERSE THAT YOU CAN CALL YOUR OWN"

A NEW LENS

While *Midnight Suns*' battles default to a close-up camera, it is possible to zoom out into 'tactics mode', which provides a topdown overview of the battlefield with all pertinent information. "That's useful in some cases," Solomon says – but he's adamant that the entire game is playable without ever using it. "Because if you can't, we're probably violating some other thing, philosophically, that we wanted to do." He's referring to the game's essential design pillars: conveying how powerful the characters are, something that's harder to do from a distance, and keeping battles fast and flowing. "We don't want the player to sit there constantly rethinking this or that decision." This was more important than making something that looks closer to the shiny blockbuster Marvel is known for, we're told – though presumably that was a fine bonus.

output. "We were reading comics at the same time, so our golden memories of comics come from the same era – the late '80s, early '90s," Solomon tells us. "It was all antiheroes and supernatural stuff and, you know, giant hair." All of which are very much present in the original Rise Of The Midnight Sons, a story about Ghost Rider battling demons and necromancers alongside Blade and Doctor Strange. "For Rocco and me, this was a formative comic-book event."

This youthful obsession would provide the solution to a problem Solomon and team never expected to have. "We had never considered the idea of making a Marvel game," he says. "As much as I personally love Marvel, it just doesn't even cross your mind." It was actually Marvel that approached Firaxis, just as the team were wrapping up XCOM 2's War Of The Chosen expansion. (And that fandom, it seems, runs in both directions. "Honestly, you often hear from execs, 'Oh yeah, I loved that game', and maybe they do, and maybe they don't," Solomon says. "But the very first call I had, there was an executive vice president of Marvel on the line, and he had very specific feedback about the finale mission of XCOM.") Without a pitch at the ready, Solomon and Rocco were sent "flipping through decades of Marvel stories in our heads", searching for the right approach.

Of course, Marvel's standing today is very different to where it was in the early 90s – and while its recent successes make this project more viable, Solomon says there is a downside. "The problem being that Marvel is everywhere now. Their movies are the biggest movies in the world, and they have been for over a decade. Now they're making TV shows, and guess what, they're the biggest TV shows in the world. There are decades of comics, there are theme park attractions, there are cartoons. They're just everywhere. As a creative team, that's actually a challenge, because you really have to find a corner of this universe that you can call your own."

That's certainly the case with Midnight Suns, which alongside the familiar faces of Tony Stark and Wolverine features heroes such as Nico Minoru and Illyana 'Magik' Rasputin. The threat they are being pitted against is Lilith, an adaptation of an obscure Marvel supervillain (and a sort of twice-removed version of the Biblical figure) rarely sighted since her '90s heyday. When Solomon tells us this is an "untapped" part of Marvel's back catalogue, he's not joking. After all, who else would even think to tap it?

The game also seems determined to find its own corner within the tactics genre, a space that Firaxis itself helped to popularise. 2012's XCOM: Enemy Unknown, with its reimagining and streamlining of Julian ▶

This is Limbo: a hell dimension most associated, in the comics, with Magik's backstory, but ruled by a Sorcerer Supreme.

FROM TOP **Chad Rocco, director of narrative, and art director Dennis Moellers**

Gollop's classic design, opened the floodgates for turn-based tactics games. Into The Breach, Invisible Inc, Mario + Rabbids Kingdom Battle – some of the finest games of the past decade have been made in the mould of XCOM. Which is perhaps why, for Midnight Suns, Firaxis has chosen to sidestep the competition and create a fresh template.

The game did start life as something much closer to its forebears – as Solomon says, "if all you have is a hammer, everything looks like a nail." But it quickly became obvious that he needed to root around in his toolbox some more. "Within the first couple of days, when I really started looking at the problem from a design standpoint, I realised, oh, man, this is like nothing we've done before. A lot of the tools we've used before don't even make sense here. We've got to do something completely new."

He's not exaggerating. Gone are the tiled maps; the chance-to-hit dice rolls; even the slightest consideration of taking cover. The camera has left its old position up in

the rafters and is instead pulled in so close to the characters the game could, at times, pass for a third-person action game. Maps are a fraction of the size, with heroes able to get from one side to the other in a single bound – internally, they're referred to as 'arenas'.

The overall feel, too, couldn't be much more different. Where XCOM is a game about being constantly on the back foot, facing alien enemies that can steamroller your entire unit in a single turn if you aren't careful, in Midnight Suns the roles are more or less reversed. Many of the more minor opponents you face don't even have health bars – after all, Captain America rarely needs a second punch to dispatch some rank-and-file henchman. "It's not about 'Can I beat this guy?'" Solomon says. "It's about 'How many guys can I beat with this one ability? How can I take out three guys at once?'"

Even with the low-level characters on show in our demo, this is immediately evident. It begins on a rooftop, where seven Hydra goons swarm our three heroes. It's not nearly enough to present a threat. Blade darts across the battlefield and unloads a pair of submachine guns into them, taking down the first enemy so quickly it doesn't even register as an action, then chains sword strikes between two more, before turning his guns on an explosive barrel. This sets up Captain Marvel to send out a photon beam that bisects the entire map, knocking out another couple of minions and leaving their armoured leader with a tiny shred of health.

The game is constantly throwing reinforcements into battle, because, as Solomon puts it, "we cannot keep the player fed with bad guys". Hydra's numbers immediately swell once more, but it doesn't matter. By the end of a second turn, they're all eliminated. "Play fast" is a mantra we hear a lot during our conversation, and for good reason. Midnight Suns' more complicated narrative missions can take a little longer, but your standard encounter should last ten minutes or less – a fraction of the time spent on a single XCOM battle.

This new approach to turn-based tactics took a long time to come together, Solomon admits. "I don't want to be dishonest and say, like, 'Oh, it was so exciting.' Because actually it was terrifying for the first couple of years." After being offered the Marvel licence, Firaxis had to do what many of us have done since the rumours first emerged: try to imagine how it might overlap with the kind of strategy games in which the studio specialises.

That process began in the same place as Enemy Unknown's design did all those years before: on the tabletop. "We had all these old Heroclix figures and we got a map of a helicarrier or a New York alleyway or something," Solomon explains. As the team started to hash out a game with the miniatures in front of them, the first idea that emerged was Midnight Suns' environmental interactions. You might not be using ▶

As well as their own particular spin on card design, each hero has to slot into a familiar tactics role. Stark is a support character.

your surroundings for cover any more, but that doesn't mean things within the environment are useless. Heroes can leap off the bonnets of cars, kick or throw chunks of scenery at enemies, and bring traps crashing down on their heads. This interaction all goes hand in hand with what the Firaxis devs refer to as "combat geometry" – Into The Breach-style knockback effects and directional attacks that reward smart positioning.

Otherwise, though, the physical prototype they ended up with worked an awful lot like XCOM. "OK, if you're Captain America, you can do these four abilities," Solomon says. "It was very similar to other tactics games, and it was OK, but it wasn't that great." The turning point in the design wouldn't arrive for another year, with the simple addition of a deck of cards.

Surprisingly, it doesn't sound as though this idea came out of the physical prototype at all. Less surprising is the game that did inspire it. "It really came out of me playing Slay The Spire. As a designer, you're always thinking: 'How can I use this? I'm in a terrifying situation right now, the thing I'm working on is not very fun.' You're grasping at straws," Solomon says. "And so I was playing that and I thought, 'Man, could I make this work?'"

And so Midnight Suns became a deckbuilder, of sorts. Each hero goes into battle with eight cards to their name, a selection of character-specific abilities that can be tweaked between missions as the card pool grows. It's the usual mix of direct attacks and non-offensive skills, with a lot of familiar keywords and concepts: taunt, block, bleed. "No ability just does damage," Solomon says. "That's one of the big things we want to do design-wise. Every ability should have at least some way that requires you to think about how best to use them."

Each hero's deck can be pushed in multiple possible directions – Captain America can be "a real tank", using that shield for its originally intended purpose, or wielding it as a weapon to become "an all-out brawler" – but they're also intended to feel distinct from one another. There are a dozen heroes in total and, we're promised, a dozen different twists on card design. Ghost Rider's attacks hit harder than most, but at a cost: "they all inflict damage to Ghost Rider too". Nico Minoru, a young witch, can't target her attacks at any particular enemy, requiring some careful management of the order in which cards are played. Iron Man's cards get better each time they're redrawn, "because it makes sense for him spiritually". Playing two Captain Marvel cards in turn allows her to go 'binary' (a nod to the Chris Claremont X-Men comics of the '80s, another major influence from Solomon's childhood), piling on the block and doubling damage – at least, until that block is chipped away, an eventuality made more likely by the fact that most of Danvers' abilities come marked with 'taunt', drawing attacks in her direction.

With three heroes on the field at one time, it feels a little like some strange Slay The Spire mod that lets the Ironclad, Silent and Watcher characters fight alongside one another. If that all sounds a bit too freeform, be assured that there are some limits on your power: you can only play three cards and only move one hero once per turn. Both restrictions, though, can be circumvented in multiple ways. Blade specialises in 'quick' cards, which refund their play cost if that attack eliminates the target, while most melee attacks seem to close the gap automatically – the daywalker will never be left swinging his namesake at dead air.

HEROISM IS, IN PART, A MANA SYSTEM OF THE KIND WE'VE SEEN BEFORE IN MANY CARD GAMES, BUT IT'S ALSO A SPECIAL METER.

Playing cards also builds up a secondary resource, known as Heroism, which can then be spent to play powerful Heroic cards, paired with big showstopper animations. We see Ghost Rider unleashing the Penance Stare; Magik bringing down a portal to swallow a soldier whole; Wolverine somehow setting fire to his claws. These are your reward for smart play – and the pride and joy of art director **Dennis Moellers**, who drew inspiration from some unexpected sources.

Unlike his teammates, Moellers was never a Marvel fan, but he had been studying the "dynamic poses" within superhero comics for years, before he had any idea a Marvel game was – forgive us – on the cards. Also on his curriculum: the likes of Attack On Titan and Demon Slayer, anime series adapted from manga, and the way they "translate these amazing comic-book poses into animation". You can see it in these Heroic attack animations, the way they seem to jump between keyframes as if skimming across comics panels then linger, in slow motion, on images you could imagine filling a whole colourful page: Captain Marvel delivering an uppercut with glowing fists, Doctor Strange opening the Eye Of Agamotto, Nico sprouting wings of black energy.

"Another art inspiration, other than the comics and anime I was talking about, was Dragon Ball FighterZ," Moellers says. "There are some moves where they zoom out to show the entire planet and you can see this explosion going off. Studying that, and Street Fighter – new and old – that was a big influence." Suddenly it all clicks into place. Heroism is, in part, a mana system of the kind we've seen before in many card games, but it's also a special meter, like Street Fighter's Super Combo Gauge. Solomon underlines it for us: "We view ourselves as having a lot in common, not with the games we've done before, but with fighting games, oddly enough. The animations are inspired by fighting games – they're very over-the-top. The arenas are about: how do you position yourself for these attacks?"

Making a "tactical fighting game", as the team call it, wasn't necessarily the intent, but rather the natural outcome of a design mantra which Solomon repeats multiple times during our conversation: "You've always got to think about the fantasy." In this case, first and foremost, that means helping the player feel like a ▶

UNSUNG HEROES

Of the 12 heroes on *Midnight Suns*' roster, we see nine in action. With Firaxis apparently given free rein to decide which characters it wanted, whittling it down to even that number "may have been the toughest part of the game," Solomon tells us. Each of the final picks meets one of two criteria: either they're a big-name character the team thought it would be fun to see in a more supernatural context (Wolverine, Captains Marvel and America) or more niche heroes for whom this is home turf (Magik, Ghost Rider, Blade). As for the three yet to be revealed, we can only speculate – and note the appearance of Bruce Banner in our demo, taking a backstage role as the team's guy in the chair, and the reference to a young Scarlet Witch.

RIGHT **We're surprised by just how fully featured the Abbey sections appear.** BELOW **While everything about the Hunter's look is customisable, Firaxis is putting this incarnation front and centre.**

superhero, "one of the most powerful people on Earth", even before they've levelled up their abilities. "In our game, Iron Man doesn't need to learn how to become Iron Man – he should be awesome from the very first time you play," Solomon explains. The cards and Heroism meter are what make this possible. "Because the player can't predict what is in their hand from turn to turn, that means we can give them extremely powerful abilities right from the start of the game."

This, though, is just one of two player fantasies that Solomon and team are hoping to fulfil with Midnight Suns. "The other is living alongside the legends. What is it like to not just fight alongside these heroes that you know and love, but to live alongside them, and see how they interact with each other?" This is a huge part of, in particular, the X-Men comics of the era that inspired Solomon and Rocco. "I always loved that in the comics," Rocco says. "Those moments where you'd see the

AT THE TEAM'S HEADQUARTERS, A MAGICAL MANSION KNOWN AS THE ABBEY, YOU'LL BE ABLE TO HANG OUT BY THE POOL.

heroes chilling, and just talking about something in their lives."

So, between missions, Midnight Suns offers an opportunity for a spot of downtime. At the team's headquarters, a magical mansion known as The Abbey, you'll be able to hang out by the pool with your fellow heroes, à la Jim Lee's X-Men. ("Jake's excitement level for the swimsuits is on par with some of our best work," Moellers adds.) You can also work out with Captain Marvel, play videogames with Ghost Rider, or meditate with Doctor Strange. And our personal favourite: "You can hold a book club with Blade."

This particular part of the game is one we're still wrapping our head around. There's a touch of XCOM's base building here, clearly: picking through the rewards of your most recent outing, choosing between research projects that will take a set number of days to complete, switching out cards in your decks. But what it resembles more than anything else is an RPG, something akin to the Normandy sequences in Mass Effect.

While you're back at the Abbey, Midnight Suns fully embraces that third-person camera view, pulling it in tight over the shoulder and giving you realtime control over one character. You can approach other heroes for a chat, take part in a spot of combat training, or just wander the grounds, which offer snippets of backstory, optional challenges and even unlockable abilities that will open up fresh areas for exploration.

It's worth noting that the character you control here isn't one borrowed from Marvel lore. They're the Hunter, a new hero created for this game and thoroughly customisable by the player. "When you're playing this game, you are not Iron Man, right? You're not Blade. You're not Doctor Strange. I want the player to feel like you're you," Solomon says. At the same time, though, they have to stand alongside those icons, whose visuals and characters "have been worked and reworked over decades".

While you'll be able to choose how the Hunter looks, they have a few distinct features: a pair of crossed swords over the shoulders, a collar around the neck, a white-and-black colour scheme that encompasses their costume and powers alike. The Hunter's abilities are broken up into 'light' and 'dark', focusing on support and offensive capabilities respectively. Combining mystical energies with physical weaponry, Solomon says ▶

STARK DIFFERENCE

In keeping with the decision to find their own corner of the Marvel universe, the team were keen to find a distinct visual take on all of *Midnight Suns*' characters. The more recognisable the character, we're told, the harder this became. "Everybody knows what Iron Man looks like," Solomon says. "So it has to look like Iron Man. But it better not look like any other version of Iron Man, because then it gets confusing." Part of the answer was drawing from the era that inspired *Midnight Suns*, in and out of comics. Wolverine is dressed in the tan variant of his suit that was an '80s staple, while Iron Man's armour is based on the vents and angles of the 1987 Ferrari F40.

"ALMOST EVERY MARVEL HERO IS TRYING TO FIND WHERE THEY BELONG IN THE WORLD, AND THE HUNTER IS NO DIFFERENT."

ASSEMBLY LINE

While Marvel has established its dominance in cinema and, more recently, television, it's yet to replicate the feat for videogames. When we share this observation, Solomon initially pushes back: "The indie darling *Spider-Man*, I guess you're referring to?" But it's hard to deny that *Midnight Suns* exists in the shadow of Square Enix's *Marvel's Avengers*. Accepting that it's yet to have the interactive equivalent of Endgame, Solomon says: "I think it's just a matter of time. Because these stories and these characters are archetypes, they're like the modern mythology." Marvel's game division is taking the same approach as its film studio, he says, partnering with creatives whose work they like and letting them do their own thing. Surely it will eventually produce the equivalent of Black Panther or Thor: Ragnarok? "I'll tell you this," Solomon says. "I'd never bet against Marvel."

"the closest analogue would be Thor" – who, notably, is not on the game's roster. Still, Firaxis's aim was to "make sure they're not just some facsimile of some other superhero, making sure they don't come off as generic". On this front, the jury is still very much out – but then, if the Hunter is meant to be the player's proxy, it's worth remembering that we've yet to see our Hunter.

Then there's the question of a narrative hook. "Almost every Marvel hero has issues they're working through, they're all trying to find where they belong in the world – and the Hunter is no different," Rocco says. They're the child of Lilith, who lost their life repelling the last demonic invasion, centuries before, now resurrected to do it again. "The warrior out of time, raised as a weapon against their own mother, brought back from the dead."

The other thing Marvel heroes tend to have – arguably the single secret ingredient of the brand's cinematic success – is a characterful quirk, something that defines their role within the larger group. Think of Iron Man's relentless quips, Star-Lord's easily bruised ego, Spider-Man's puppylike earnestness. The Hunter, essentially, is a bit of a square. The impression we get is of a perpetual straight man, someone who takes those trademark jokes and references very literally. It's not their fault – they were last alive in the 1600s, after all, and have only known conflict. "Over the course of our game, the heroes actually pull the Hunter out of that," Solomon says.

Trained to be a weapon, needs to learn to be a person – it's a good hook, with just enough blue sky between it and the nearest comparable Marvel character. And it sounds as though this will be the backbone of Midnight Suns' story. It's certainly the part that interests us, much more than all the usual business with a world-ending threat. The Abbey sections are a chance to get to know Midnight Suns' cast, who have been written to be distinct from the incarnations we already know – another example of the game trying to carve out its own niche amid the Marvel oversaturation.

The snippets of Tony Stark we see, with a neatly trimmed pencil moustache rather than the Downey goatee and a voice performance that has a touch of old radio drama, suggest more of an 'early-20th-century captain of industry' take on the character. He's paired with Doctor Strange in the Abbey's forge, handling upgrades and unlocks, a little like XCOM's Drs Shen and Vahlen. "They're our odd couple," Solomon says, describing this version of Strange as "sort of fussy".

It's not just the Hunter – and thus you – getting to know these heroes. The roster is divided in two, between the well-established Avengers and the younger Midnight Suns team, who specialise in supernatural affairs. "To the Suns, the Avengers are the old guard, they're trying to come in and take over," Rocco says. "There's tension right from the start when the heroes show up – there's this young-versus-old, 'OK Boomer' vibe that will carry across the entire game. It's a big theme for us."

This kind of interpersonal soap-opera drama seems to get the team just as excited as the tactical combat. The Abbey is a major part of the game, at least as much as the strategy layer of the XCOM games ever was – and seems to have just as much impact on what you're taking into battles. Those hangouts we mentioned are an opportunity to level up your relationship with each individual hero, and will reward you with everything from passive boosts to combo cards that'll be added to your deck if both heroes are present.

To maximise the amount of friendship squeezed out of each interaction, you'll need to pick the right location or activity, and say the right things in dialogue. You can even buy them gifts. "I want to make it very clear, it's not romancing," Solomon tells us. "Don't get me in trouble!" Nonetheless, there's a definite influence from dating games, along with other titles that thread character development between outings. Solomon namechecks the Persona and Mass Effect games, as well as the game that leapt to mind for us, with its blend of tactical battles and social elements, Fire Emblem: Three Houses. "There are a lot of games, I think, [that] do awesome stuff with relationships that we have all played and been impressed by."

This game is the natural evolution, in some ways, of War Of The Chosen's experiments with character bonds, which reward you for taking certain pairings of soldiers on missions together – and make it all the more heartbreaking when one of them is lost in battle. There are shards of XCOM design everywhere, if you squint, but Midnight Suns is certainly not the game we'd have expected Firaxis to make next.

Put aside the Marvel of it all – it's this element of surprise that has us most excited. Firaxis has rolled up a disparate selection of influences into something that doesn't quite resemble any of them. Midnight Suns isn't exactly a card game, nor is it a relationship-building RPG or the turn-based answer to Street Fighter. It's certainly not a straightforward tactics game in the mould of XCOM or the wave of games that iterated on its ideas, though it does borrow from them in places.

In all its strangeness, Midnight Suns looks like it could actually be something new. Can Firaxis pull off the same trick twice? Could Solomon and team have struck on the formula for the next wave of brilliant imitators? Will all these ideas even manage to gel into something that feels like a coherent piece of design? That all remains to be seen. But we're certainly ready to be surprised. PC

Nico Minoru is one of the newer heroes – taken from Runaways, a 2000s comics series that spawned a mediocre TV show.

THE DUNGEON MASTERS

How **D&D** shaped every corner of PC gaming.

By Jeremy Peel

It explains a lot about Warren Spector, the driving force behind *Deus Ex*, that his first dungeon master was the author Bruce Sterling. Not only was Sterling destined to become one of the fathers of cyberpunk – the science fiction genre that spliced future tech with social commentary, just as *Deus Ex* would – but he was a generous and accommodating DM.

"What was most powerful about that first night, and all the nights that followed for the next ten or so years, wasn't the story Bruce was telling to us," Spector says. "It was the story my friends and I were telling with him."

Spector's head still swims with memories of the Rat Gang, the street crew he ran with as Botara Chitan, a samurai who never smiled. He remembers the way the gang fought and grasped and became a real power in the river city of Shang, and how the campaign ended with... well, he won't tell us how it all ended. "I'll get too emotional," he says, "and embarrass myself."

Like all good dungeon masters, Sterling understood that his role was to create the scaffolding of a story, an obstacle course that left enough room for players to pick a route through, whether that meant clambering over the top or crawling beneath. As Spector and his friends overcame the challenges Sterling set for them, they made choices that felt significant.

Decisions that belonged to them.

"If that doesn't sound like the kind of videogame I've basically been screaming about for the last few decades, I guess I'll just have to scream louder," Spector says.

"All I've ever wanted to do was give people a taste of what I felt playing D&D."

ORIGIN STORY

After a brief spell at D&D's publisher in the 80s, Spector set about applying his love of shared authorship to PC games, working under Richard Garriott at Origin Systems.

"I think D&D influenced everyone in the computer game business back in the '80s and '90s and that was certainly true at Origin," he says. "The *Ultima* games were about more than killing monsters and grabbing treasure. They were about embodying an avatar that was, basically, you, the player, deciding how to interact with the world based on your own desires and ideas as a person in the real world. You weren't trying to guess what your character would do or what the designer wanted you to do. It was you making the calls. It was all pretty primitive back then, but it was heading in the right direction."

I THINK D&D INFLUENCED EVERYONE IN THE COMPUTER GAME BUSINESS BACK IN THE 80S AND 90S.

As a producer on the early games of Looking Glass, the developer behind *System Shock* and *Thief*, Spector had a hand in defining the immersive sim genre. Though these games looked more like first-person shooters than any tabletop adventure, they did exactly as a DM would – present the player with an obstacle, then try to accommodate their most imaginative solutions.

"The idea is to allow players to do anything they want and not disappoint them," Spector says. "Ideally, the game should never figuratively say, 'I don't know anything about that.' Something logical should happen no matter what players do."

Spector began banning his teams from using the word 'puzzle', which implied a single solution, and

ABOVE: These walls are filled with shafts, built not for ventilation but player choice.

RIGHT: Warren Spector produced the second part of the hugely influential *Ultima VII*.

encouraged them to think up 'problems' instead. He told them to "get off the stage, so players can get on it". It's an approach that led directly to *Deus Ex*.

"*Deus Ex* was about solving problems the way you wanted," he says. "It was about trying things, experimenting, expressing your creativity, and then dealing with the consequences of your choices.

"The story, as much as people seem to like it, is really there just to provide context, significance and structure to the player's minute-to-minute choices. That's totally D&D in a nutshell."

PLAYING IT WRONG

Once *Deus Ex* was built, Spector was delighted to discover that it recreated a great, subversive joy of the tabletop: stumping the DM. "There were plenty of times I watched *Deus Ex* players encountering a problem and trying something I'd never seen anyone try before, and found myself wondering, 'Is that going to work?'" he says. "And then, whether it worked or not, having the game respond in a logical way? Man, that was powerful. And all D&D."

In the years since, the designers who worked under Spector have disseminated across the games industry. One, Emil Pagliarulo, led design on *Fallout 3* and *4*. Another, Kent Hudson, became game director of *Watch Dogs: Legion*. Many are now at Arkane, working on *Deathloop* and *Redfall*. All have embraced some variation of the dungeon master role, forefronting creative problem solving in their games, which in turn have taken over PC gaming.

Still, Spector thinks some developers get the wrong end of the stick. "A lot of RPG developers think roleplaying is about character classes and skills and abilities and stats and secret die rolls," he says. "That's true of D&D, but only because those were the only simulation tools Gary Gygax and Dave Arneson had.

TOP OF THE TABLE

PC gaming's favourite pen and paper worlds

PATHFINDER

While rooted in D&D's third edition rules, Pathfinder's fantasy world had identity enough to spawn a popular RPG, *Kingmaker* – which has in turn spawned a brand-new sequel.

CYBERPUNK

Mike Pondsmith's legendary sci-fi setting went decades without any representation on PC. But CD Projekt Red made up for it by pouring all its *Witcher III* cash into a lavish, if flawed, blockbuster.

WORLD OF DARKNESS

Is vampirism a curse? A cancelled World of Darkness MMO from the makers of *Eve Online*, not to mention the development hell of *Vampire: The Masquerade – Bloodlines 2*, would suggest so.

The Dungeon Masters

» Videogames can and should be about roleplaying, not roll-playing."

ROLL OUT

Of course, there's no reason games can't do both. Bioware, which worked on three officially licensed D&D games, was understandably preoccupied with reproducing the tabletop ruleset – down to the 1d4+1 damage caused by a magic missile. Yet its origin point wasn't so different to Spector's, and yielded just as much inspiration.

Half the key characters in the *Baldur's Gate* games – including their villains, as well as fan favourite companions like the psychopathic red wizard, Edwin – were initially player characters in a D&D campaign run by designer James Ohlen. "While he was in high school he owned a comic book store," recalls Bioware cofounder Trent Oster, "and he would run play sessions upstairs." Programmer Cameron Tofer played Minsc, but fumbled his Intelligence roll – and so birthed the breezily braindead barbarian we know and love today. Ohlen was ultimately hired by Bioware almost by default, despite having no development background – he was the DM, and the party needed him. By the time he left the company 22 years later, he was its senior creative director.

After *Neverwinter Nights*, Bioware moved on from D&D – but the influence of its min-maxing ruleset could still be felt in *Knights of the Old Republic*, *Dragon Age*, and the RPG industry that grew around the studio.

HALF THE KEY CHARACTERS IN THE BALDUR'S GATE GAMES WERE INITIALLY PLAYER CHARACTERS IN A D&D CAMPAIGN

TOP: *Neverwinter Nights* is the Hollyoaks: After Hours of D&D game titles, if we're honest.

What's more, those rules came with a worldview.

"It's almost a philosophical thing," Oster says. "The concept of the group being mighty because of the combination of different abilities, backgrounds, and viewpoints. D&D preaches the bible of diversification, and it always has. You realise that the group is greater than the one."

It's an idea that resonated with the public, particularly when *Mass Effect* leaned into the emotional – even romantic – connection with the party. Today, the concept of the RPG companion is a widely understood part of pop culture, rooted in Bioware's appreciation for D&D.

You could say the same for the famous moral choices that pepper the studio's games. First popularised by *Knights of the Old Republic*, on which Ohlen was lead designer, they can be clearly traced back to D&D's alignment chart – which judges every character as good, neutral or evil.

"The concept of good and evil was a big thing at Bioware," Oster says. "Most games at that point were really focused on you doing the right and just thing, whereas almost everything we did allowed you to try being bad. That duality came out of pen and paper. When you're playing D&D, sometimes your party are jerks, and your DM lets you roll and see where it goes. A lot of that player freedom came from those D&D roots."

IMPENDING DOOM

id Software's dungeon master, John Carmack, allowed his party to be jerks. But he pulled out the ultimate consequence in response – the end of the world.

"Yeah, that was my fault," says *Doom* designer John Romero. "I was greedy and underestimated the power of demons." When the party came across a pentagram in its adventures, the summoned demon trapped inside tempted Romero with powerful items in return for its freedom: a +5 sword, a ring of regeneration, and a ring of invisibility. "I wanted that stuff badly," Romero says. Once freed, the demon made good on the deal, but offered a few ominous words, "It won't matter anyway. We're taking over this world.

"We all spent the next month battling demons, hiding, watching powerful heroes lose the fight, and eventually the world was wiped out. That was the last time we played D&D together."

It may have been a cruel conclusion to the party's journey, but Romero insists that Carmack was a "very fair DM" who was "true to his own rules". "He was always rolling secret dice because there were so many ways that things could go wrong or be revealed," he says. "A random chance encounter could happen. There was never a dull moment."

It was Carmack who lost most in the demonic fire – a huge, personalised world of at least 100 NPCs operating their own schemes. Yet his loss was our world's gain, since those D&D sessions inspired the premise for *Doom*, a game about a Martian base overrun by invaders from hell.

"We never thought that the D&D games we were playing would end up influencing our game designs," Romero says. "It just flowed easily and was enthralling. We all liked playing together. No one pored over stat sheets, and no battle or rewards were held up due to some arcane rule lawyering. D&D was yet another way that we gelled as a team."

SHAKE UP

One of Carmack's NPCs was called 'Quake'. He belonged to a group called the Silver Shadow Band, which worked for an organisation named Justice.

DUNGEONS & JARGON

A handy glossary of weird tabletop terminology

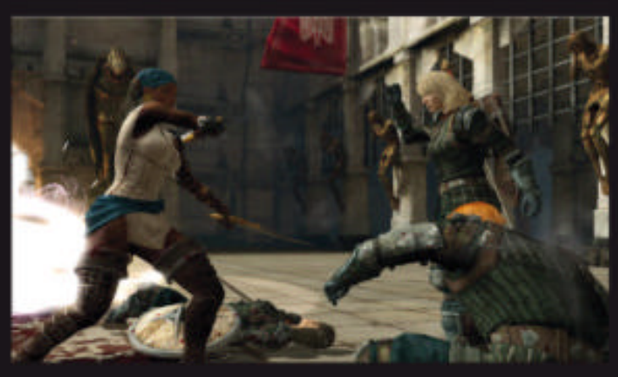
"GROGNARD"
A player who prefers the company of the older editions, thank you very much. Doesn't need your newfangled 'short rest' mechanics.

"SKILL MONKEY"
A party member who primarily shines off the battlefield – perhaps as a linguist, thief, or survivalist.

"TRIPPER"
A character who specialises in knocking enemies flat on their backs.

"TPK"
Total Party Kill. If you're subject to one of these, your DM may be John Carmack.

RIGHT: Give this Zombieman an axe and you've got id Software's tabletop campaign.



ABOVE: Bioware games are defined more than anything by their companion characters – an idea directly inspired by D&D parties.

After a few adventures in *Quake*'s company, the id Software team thought he was cool enough to be the protagonist of a videogame.

"We started working on it in January 1991," Romero says, "but the tech wasn't good enough and we cancelled it." After *Doom*, Romero returned to the idea – dreaming up an action game that would have armed players with a huge hammer that cracked the earth, and seen them accompanied by a sentient artefact called the Hellgate Cube. You can see remnants of that design in the finished FPS that shares *Quake*'s name – especially the medieval aesthetic and D&D-esque locations, like the Ogre Citadel and Wizard's Manse. Its oppressive, dark fantasy atmosphere is embedded deep in the memories of a generation of PC gamers, and is an important influence on modern indie shooters.

Even after leaving id Software, those D&D sessions lived large in Romero's memory. He named his breakaway project, *Daikatana*, after the very +5 sword that got his party into so much trouble. Perhaps that was tempting fate: *Daikatana* would prove to be a notoriously troubled project.

Today, you can find D&D in the bones of Romero Games' strategy game, *Empire of Sin*. "D&D will forever be a part of any video game that requires calculations to resolve conflict, to get loot drops, to define character traits," Romero says. "D&D is all about progression and making sure the calculations work as characters progress. Those core elements ensure that players remain interested because they are evolving with the game."

NEW EXPERIENCE

It's these latter concepts – of XP and levelling up – that might be D&D's most pervasive contribution to PC gaming. They provide essential punctuation to *Diablo* and *Destiny*, keep *COD* players killing, and grant *The Witcher III* its slowburn structure. Strip away those

TOP: John Romero did make a game with a hammer in it, but sadly, it was *Daikatana*.

LEFT: A fantasy influence on *Quake*? Surely not.

GRATEFUL TO GYGAX

The PC games that pay their respects

TINY TINA'S ASSAULT ON DRAGON KEEP

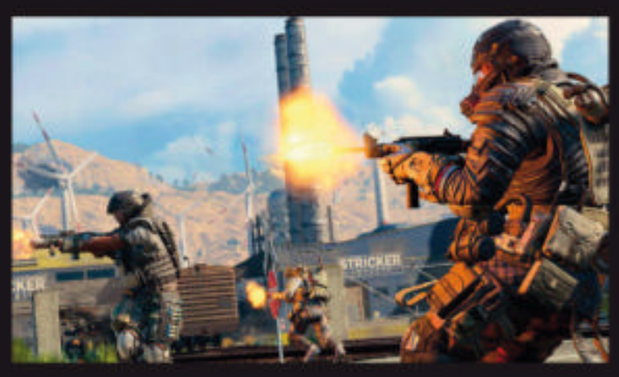
In this *Borderlands 2* DLC, Tina serves as 'Bunker Master' in 'Bunkers & Badasses'. The idea has since spun off into a whole new game called *Wonderlands*.

(ASMR) VIN DIESEL DMING A GAME OF D&D JUST FOR YOU

A very real game, playable on itch.io, which simulates a tabletop sesh with Hollywood's baritone beefcake. Soothing.

LIFE IS STRANGE: BEFORE THE STORM

A whole scene of Deck Nine's teen drama prequel is dedicated to roleplaying as an elf barbarian before class.



fundamental ideas, and it's hard to imagine what PC gaming would even look like.

"It's funny," Spector says. "I'm actually a proponent of not focusing on XP and levelling, but it seems like most of my games include them no matter how I feel about it. I'll never quite understand that. I guess it's impossible, at least for me, to leave D&D behind completely." Spector recognises, grudgingly, why the stats and skills he speaks so disdainfully of have spread so far – even if he doesn't recognise them as the spirit of D&D. "Players 'get' that approach to roleplaying," he says. "It makes it easier to inhabit an avatar you created systemically, rather than one you create on the fly through your in-game behaviour. Familiarity breeds comfort and comfort leads to a kind of enjoyment."

The immersive sims that capture the sense of freedom Spector first felt at Bruce Sterling's table are, he admits, intimidating. "They force you to think and, in a weird way, take responsibility for your actions," he says. "Because they're your actions, not your character's. You have to stop, assess, plan and only then act. If we're being honest, all that stuff is work – fun work, but work. Tabletop RPG tropes are simple, well understood and put the focus on the character and the designer's story. That's comfortable for players." It's not the end of the story, however. In 2021, PC developers are working to tie roleplaying and roll-playing together. Just look at *Baldur's Gate III*. Larian's upcoming RPG is an officially licensed D&D product, which mimics the ruleset of the boxed game and copies its creatures straight from the Monster Manual. Yet more than that, it's an immersive sim by Spector's definition: a world full of obstacles you can overcome through simulated stealth or intense combat, by manipulating objects in the environment, or by talking your way out of trouble. A sturdy platform of story scaffolding on which to drape your adventures.

D&D has delved into and conquered every last nook of PC gaming. And now, finally, the party seems to be coming back together. ■

D&D IS ALL ABOUT PROGRESSION AND MAKING SURE THE CALCULATIONS WORK.

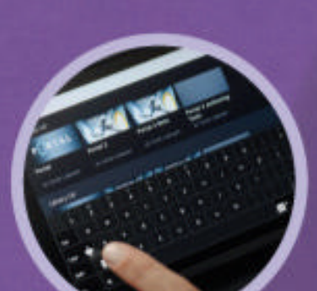
Image credit: Jason Scott, CC BY 2.0

STEAM DECK

WORDS *Wes Fenlon*

PHOTOS *Dabe Alan*

CONTENTS

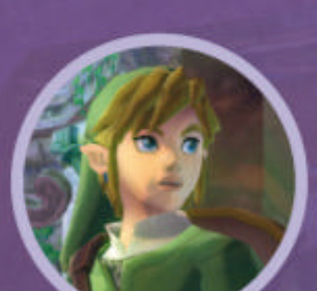


52 **HANDS-ON**

56 **TECH SPECS**

58 **STEAM DECK VS SWITCH**

60 **SHOULD YOU BUY?**



62 **EMULATION POTENTIAL**

Full Steam Ahead

Hands-on with the **STEAM DECK**, Valve's attempt to make your Steam library portable.

Pictures of the Steam Deck couldn't prepare me for seeing it in person. After working on the Steam Deck in secret for years, Valve invited us to its offices to be among the first to test out the handheld gaming PC, before game developers have even gotten their hands on it. And wow, is it big. This is the full tower PC case of videogame handhelds.

Once I actually picked up the Steam Deck, though, the size didn't seem to matter much. At .66kg it isn't too heavy to hold comfortably. It's wide, but the inputs are close enough to reach naturally. The button arrangement may look a little odd, but it fits how you grip the device. The Steam Deck is as big as it needed to be to pack in all the features Valve thought it should contain (which is basically everything, minus the CD drive).

Somehow it all fits in an 11.7-inch wide tablet. Spending a couple hours with the Steam Deck was convincing: it's not the first Frankensteined mash-up of PC and Game Boy, but it's easily the most polished and premium I've seen.

With Steam Machines, Valve tried and failed to sell PC gaming in the living room. But PC gaming anywhere? That's a harder pitch to ignore. And once I started using it, I could almost forget that the games I was playing were never designed for a portable machine.

BUTTONED UP

The ambitious goal with the Steam Deck is to be able to play the entire Steam library – that's more than 50,000 games – at launch via Proton, Valve's tool for running Windows games on the Deck's Linux-based SteamOS. "We tried to put enough types of input and ways to play on there, and make it all easy to use, so that anybody can find a comfortable way to play the game they want to play," says Valve designer Tucker Spofford.

It took me maybe ten seconds with the analog sticks to be certain I vastly prefer them to the Nintendo Switch's undersized joycons. They're much bigger, with a fluid rotation comparable to an Xbox stick. The face buttons are also a good size and comfortable to press as I pulled my thumb off the right joystick. Don't worry about that B button – it may look like it's hanging off the edge of the Deck, but in use it's no problem.

RIGHT: The Steam Deck runs on Linux.

BELOW: The triggers are chunky, tactile, and pleasantly wide.

Image credit: Valve

THE STEAM DECK FEELS LIKE A BIG, CONFIDENT STEP FORWARD FOR VALVE

TEST DRIVE

What we played on the Steam Deck

DEATH STRANDING
Kojima's game pushed the Steam Deck to its limits, and it was pumping out some heat to maintain 30 fps. But it was surprisingly playable, making me believe Valve's claim that the Deck can handle all they've thrown at it.

GUILTY GEAR STRIVE
After a couple crashes I got Guilty Gear to run on the Deck. It was slow to load from the SD card, but once it was running it looked great. Valve also had it running with a Bluetooth controller to highlight the Deck's versatility.

DEATH'S DOOR
Continuing the death theme, I played this delightful indie adventure, which felt mighty smooth with the Deck's analog stick. I expect to play a lot of indie games on the Steam Deck at 60 fps that can only run at 30 fps on the Nintendo Switch.

The analog triggers have a nice 'throw' to them, again reminiscent of the Xbox, and the shoulder bumpers are generously wide, letting you press them over a good inch and a half of real estate.

"We learned a ton when we were iterating with features on [the Steam Controller]," says designer Greg Coomer. "We even built ones with physical trackballs and all kinds of methods of doing capacitive input and touch. That went all over the place. Once we got to the Steam Deck, we felt like we had our desired inventory of controls. The iteration was on the physical form and where those things went."

GETTING TO GRIPS

I was impressed by how reachable everything felt from my natural grip. Valve says a lot of 3D printing and prototyping went into finding that sweet spot for comfort, including testing with their kids. "The device itself is large," says Spofford. "Part of that is just due to the fact that it's very comfortable to play with. In order to get that comfort, we needed a bit more space than you'd see on a Switch." After the funky ergonomics of the Steam controller, the Steam Deck feels like a big, confident step forward for Valve. But that only gets the device halfway. The big question still looming over the Steam Deck is whether Proton can really run tens of thousands of games without major bugs or performance issues. Can SteamOS finally offer up a gaming experience comparable to Windows?

PROTON POWER

Valve designer Greg Coomer is optimistic. He says that in the early days of working on Proton there were big categories of things – whole game technologies or media codecs – that didn't play nice with Linux. But those major hurdles have mostly been cleared. "There remain one-off problems that we still consider important... because people will want those games to function on Steam Deck," he says. "But we've managed to make our way through the largest category of those things and the ones

that remain we have pretty good confidence that we're going to be able to solve, like anti-cheat."

Compatibility doesn't necessarily guarantee great performance, but I was impressed by what I played of *Death Stranding* on the Deck. Even without much tinkering in the graphics settings, I was able to get a mostly consistent 30 fps in a big, modern open world game. The custom AMD hardware powering the Steam Deck has some serious gaming muscle: it's roughly as powerful as a previous-gen console like the PS4, with the advantage of running at a lower screen res. And unlike other handheld PCs, the Steam Deck doesn't have to deal with the performance overhead of Windows.

SteamOS gives the Deck the flexibility of Linux – if you want to put it in desktop mode and use it as a portable PC, you can – and some of the advantages of consoles like the Switch that you just can't get in Windows. At the press of a button you can pull up the Steam menu, suspend a game, and hop back over to your library. You can also put the Steam Deck to sleep and come back to it hours later. "We actually worked with AMD on the low power state to make sure sleep and resume would work well. We're really happy with the speed of it," says Coomer. Another button pulls up a quick settings menu reminiscent of the Switch's, giving you easy access to the system brightness and volume as well as toggles for wi-fi and Bluetooth.

We've long been able to Alt-Tab on PC, but some games in Windows somehow still throw a fit (and they should feel bad). Here suspension

STEAM POWERED

Where Valve may take the Steam Deck next

COLOURFUL CASING

It's just black at launch, but colour was hotly debated among the development team. Greg Coomer says, "We might do a lot more with that in the future."

DELUXE DISPLAY

The Deck uses an off-the-shelf display, which Coomer would like to improve, "The screen would be the centre of our focus in what we do different with a next version."

A LITTLE BIT MORE ZEN

Coomer says Valve isn't designing a Deck 2.0 yet, but they've "definitely talked with AMD about what [they'd] like to do next". Going up to Zen 3 mightn't be an issue.

RE-ARCHITECTED

Coomer says that "if the Steam Deck is really a hit, then I think that should drive the architecture of upcoming CPU/GPU/APU devices. And probably not just from ... AMD".

Image credit: Valve

LEFT: You can use the in-built controls, or connect up external controllers.

BOTTOM: The control layout is designed to cover as many different games as possible.

and quick settings just work, making the Steam Deck feel like a proper console rather than a PC with joysticks bolted onto it (though I did manage to crash it by trying to launch a game while another was suspended – there are definitely still bugs to work out).

As Valve continues to refine Proton, plenty of games will just work, but there will also be ways for developers to optimise for the hardware in the future.

"There will be an API that developers will be able to call that says 'Is this Steam Deck? If so, use these settings," says Valve designer Lawrence Yang. He compares it to how many games already detect some basic info about your hardware, like monitor resolution, and adjust accordingly. Hopefully by launch many games will have updates with settings optimised for the Steam Deck, but the graphics settings will still be there for us to tweak by hand if we need to.

DIALING IN

Valve has work left to finish on the Steam Deck, mostly on the software side. SteamOS 3's new design looks great, but it isn't as seamless yet as a console UI and there are bugs to squash. The hardware isn't quite final, but I expect only minor changes that affect manufacturing and reliability.

According to Coomer, the Steam Deck team is now focused on how to speed up production in spite of the shortages affecting the entire tech industry. After Valve launched pre-orders, shipping estimates quickly stretched out to mid-2022.

"If only it was as simple as building out more factories and staffing them, we'd have a lot of good news for people who want a Steam Deck this year," he says. "We're very happy with the level of demand, but it also just makes our job much clearer. We really ought to deliver devices sooner than we have told customers we'll be able to. So we're working on ways we might be able to do that."

After spending a far-too-brief couple hours with the Steam Deck, I don't think it's a straight replacement for the Nintendo Switch. Its bigger size isn't quite as ideal for tossing in a backpack, but as a portable PC it's truly impressive. If SteamOS can pull off the compatibility and performance Valve's aiming for, we're going to be spending a whole lot less time at our desks next year. PC Gamer cruise, anyone? ■

1 D-Pad
Valve says one of the Deck's key designers is a diehard fighting game fan, so this d-pad got a lot of love. It's clicky and, most importantly, rocks from the centre so you can pull off sweeps and quarter circles with ease.

2 Grips
The Deck's top-heavy button placement makes sense as soon as you hold it. The sculpted sides encourage you to cradle it near the top, and give you a lot more to grip onto than the Switch's flat joycons.

3 Steam button
The Steam button gives the Deck the console-like power to suspend games and jump back to your library or go into sleep mode. Think of it as a supercharged Steam overlay.

4 Display
With a 1280 x 800 native resolution the Valve has opted for a slightly unusual 16:10 aspect ratio rather than the more regular 16:9. Though the low-res screen still won't be super demanding on the hardware inside.

Tech specs

Let's break down the Steam Deck and see exactly what makes it tick.

By Dave James & Wes Fenlon

8 Storage
The Steam Deck houses either 64GB of eMMC storage, or either a 256GB or 512GB NVMe SSD. You can also store an extended library on SD cards, though the speed will be lower than onboard storage.

9 SteamOS
SteamOS 3.0 is the latest version of Valve's operating system, but with updates to its Proton compatibility layer, the promise is for the Deck to run every game in your library whether it's meant for Windows or not.

5 The CPU side

The AMD APU, formerly code-named Van Gogh, contains both the CPU and GPU. On the CPU side we're talking last-gen Zen 2 silicon, but with four cores and eight threads, at a peak 3.5GHz, it's still impressive mobile tech.

6 The GPU side

Where the CPU may be last-gen, the graphics cores are current-gen. These are the same RDNA 2 GPU cores that make up both the PS5 and Xbox Series X/S. Though with just eight compute units instead of 52.

7 Memory

The Deck is one of the first devices to use LPDDR5 memory, a low power, high-speed set of RAM, running in quad-channel mode to boost the available bandwidth. And that is something which AMD APUs love.

SPECS AT A GLANCE

CPU
AMD Zen 2

Core count
4-core/8-thread

CPU clock speed
2.4–3.5GHz

GPU
AMD RDNA 2

GPU Compute Units
8

GPU clock speed
1–1.6GHz

RAM
16GB LPDDR5 @ 5,500MT/s

Storage
64GB eMMC / 256GB NVMe SSD / 512GB NVMe SSD

Display
7-inch LCD touchscreen

Resolution
1280 x 800

Refresh rate
60Hz

Audio
Stereo speakers, 3.5mm jack, dual mics, USB Type-C/ Bluetooth

Connectivity
Wi-Fi, Bluetooth, USB Type-C with DisplayPort 1.4 support

Battery
40Whr

Size
298 x 117 x 49mm

Weight
669 grams

Price
US$499 (64GB) / US$530 (256GB) / US$650 (512GB)

10 Windows 11

You don't have to stick with SteamOS, however, as Valve has promised that you can install Windows on there if you so wish, and that "there's nothing to indicate to us yet that there'll be any issues with Windows 11".

11 Finish

At launch there will only be a black version of the Deck, because having multiple colours is just too complicated. But if it proves popular we've been told "there's tons of opportunity" for different colours later.

12 Upgradeability

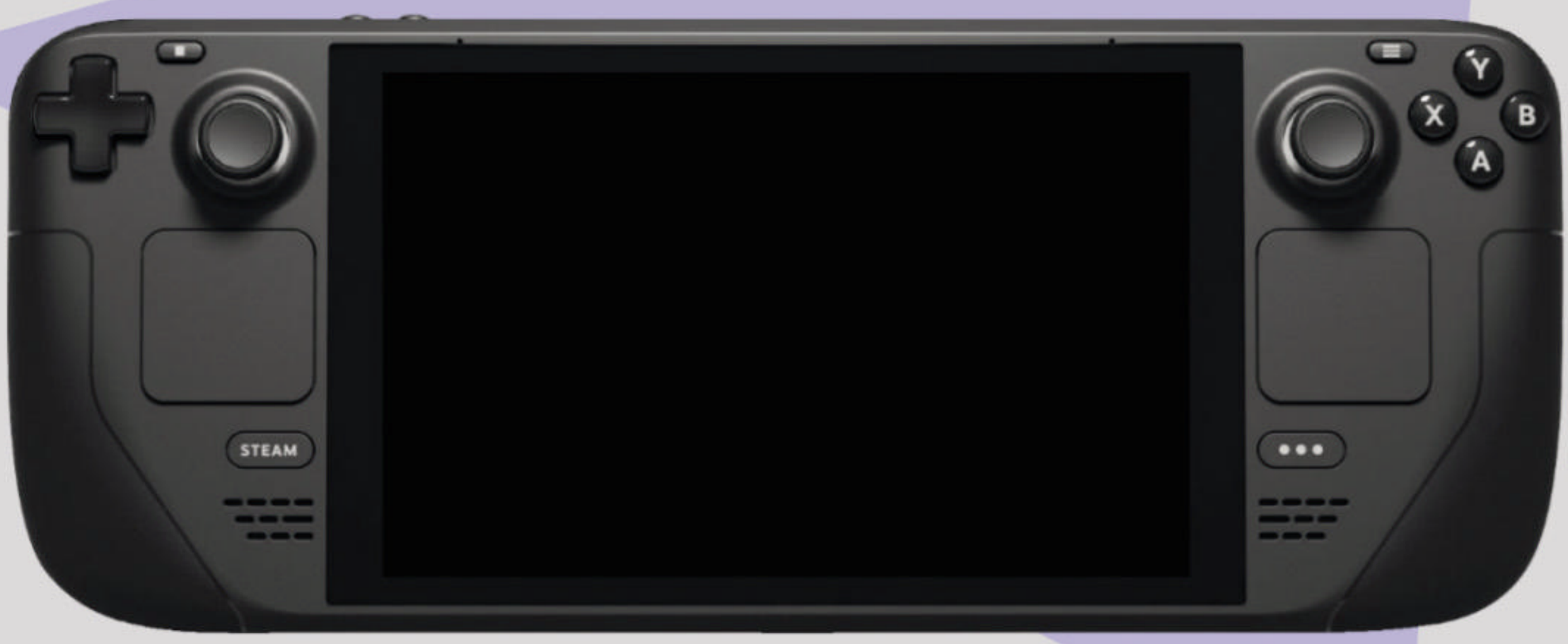
Technically it will be possible to upgrade the storage in your Deck, but Valve has suggested you shouldn't as taking the thing apart isn't recommended. It has teased it may release more info on that front soon, though...

13 Ecosystem

This isn't the first handheld gaming PC, but it is the most affordable. And, along with SteamOS 3.0, the company is hoping that it can encourage other manufacturers to create their own versions.

Steam Deck vs Nintendo Switch

The new kid on the block taking on the undisputed monarch of the gaming handhelds. ***By Dave James***



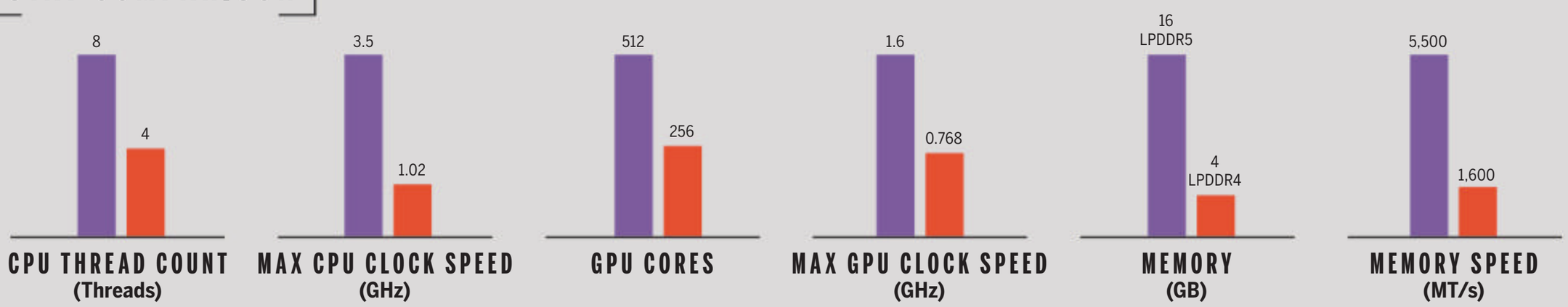
VALVE STEAM DECK

The Steam Deck is a whole gaming PC that you can hold and control in two hands. That's both its biggest strength and potentially its greatest weakness. It means there is a huge back catalogue of games available to the Deck, starting with Steam itself, but stretching out to every other PC gaming store front out there, all delivering games to your handheld machine. But there's the potential issues with Linux game compatibility for its SteamOS, and the fact that it feels like a genuinely hefty system to hold for a long gaming sesh.

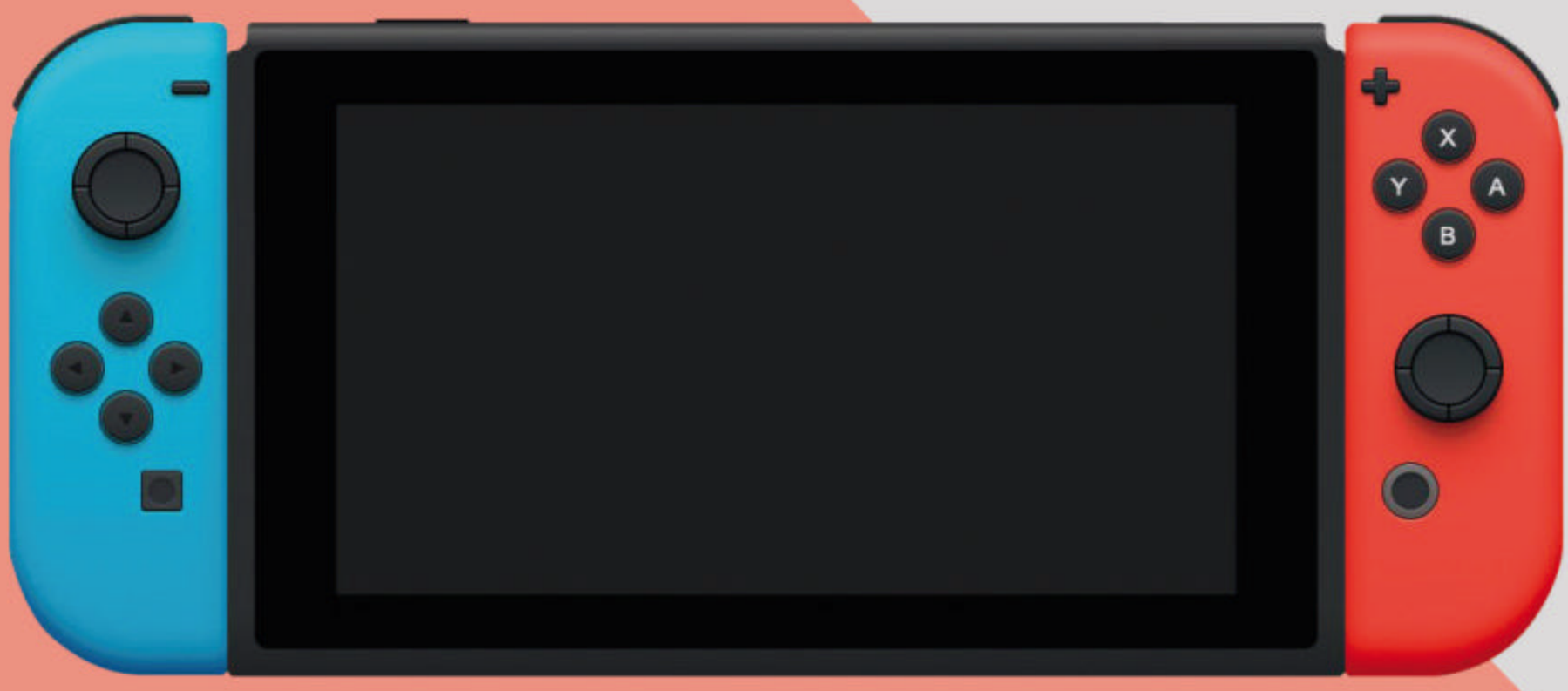
IN SHORT

- ⊕ Access to the biggest game catalogue around
- ⊕ Impressive-looking AMD APU
- ⊕ LPDDR5 could be a game-changer
- ⊖ Some games not optimised for Deck or SteamOS
- ⊖ Likely less accessible to use
- ⊖ Bulky and heavy

STAT COMPARISON



THERE IS A HUGE BACK CATALOGUE OF GAMES AVAILABLE TO THE DECK.



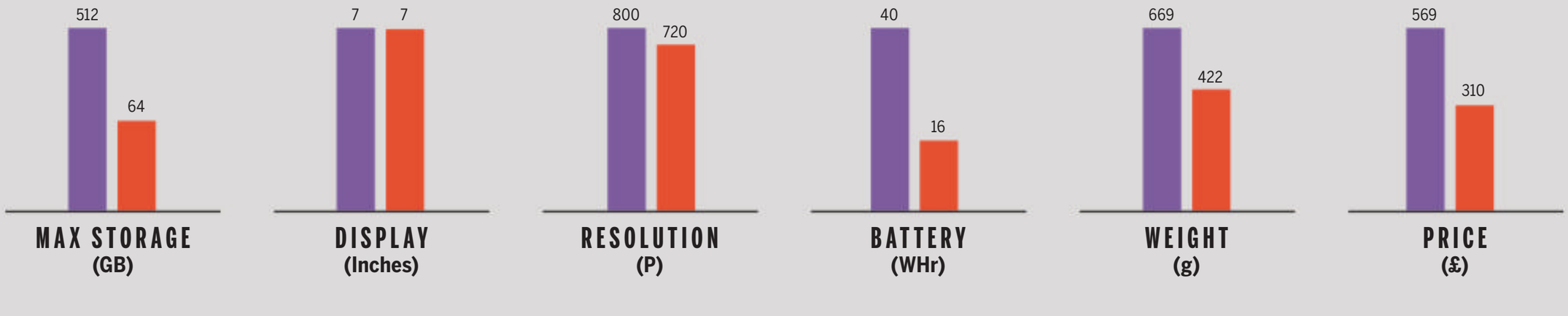
NINTENDO SWITCH

IN SHORT

- Games made specifically for the Switch
- Boosted when docked
- Great price

- Weak hardware
- Poor thumbsticks and triggers
- Low battery life

Nintendo is the master of the handheld games machine. We'll forgive the Wii U for the legacy of the Gameboy, DS, and now the excellent Switch. Nintendo has always played its hardware game smart, by making its devices affordable with tech *just capable enough* to deliver on the promise of the system. With first-party games being made specifically for the limits of its internal components you never feel like compromises have been made... until you hit cross platform titles, that is. That's when you can see how the Switch's lightweight tech struggles.



Are we buying a Deck?

The positivity, perils and pitfalls of the Valve's great hope for handheld PC gaming.

Image credit: Valve

DAVE JAMES

Hardware Lead

I'm not sure if it's a symptom of the patented Gabe Newell Reality Distortion Field, but I'm a whole lot more positive about the Steam Deck now than I was when it was first announced. It's normally the other way around, getting dragged on by the hype machine before the devil in the details convinces me otherwise.

I'm actually loving the chonky look of it, the AMD-based hardware has a lot of potential with its LPDDR5 backup, and SteamOS 3.0 and Proton could genuinely bring Linux gaming to the masses. But there is one potential sticking point that's going to have to be ironed out for the Deck to be the sort of broad appeal success Valve seems to think it will be. That issue is optimisation.

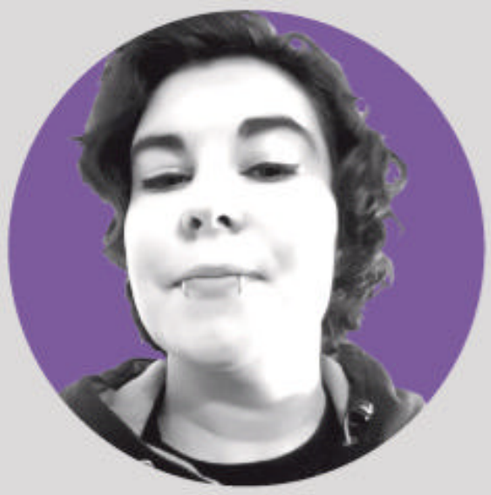
> THE AMD-BASED HARDWARE HAS A LOT OF POTENTIAL WITH ITS LPDDR5 BACKUP.

The Deck is playing games designed to look their best on an RTX 3080, and while the beauty of the PC is its versatility and the fact game settings can be tweaked so almost any level of machine can get in on the experience, the Deck's users are going to need some outside help to ensure a great out-of-box experience. If Valve can create some sort of GeForce Experience-like app, which can automatically adjust installed game settings for the best performance, then its hopes of a pick-up-and-play console for anyone could well be a reality.

BATTERY COMPARISON

How far can you get on the Steam Deck's eight hours of battery?

8%	9%	10%
THE WITCHER II	CRUSADER KINGS III	DIVINITY : ORIGINAL SIN II



KATIE WICKENS

Hardware Writer

I have to say I'm impressed with the graphically intensive games Valve promises I'd be able to play with the Steam Deck. But for short gaming stints – which is what, unless I find myself on a flight to Fiji anytime soon, I imagine portable gaming would involve for me – I tend toward less intensive RTS and simulation games. I'm too easily distracted to get into a fully voice-acted RPG when I'm out and about.

That leaves me at an impasse, because I just can't imagine playing *Cities: Skylines* on the weird trackpad setup Valve has opted for. And I remain unconvinced that the touch screen could handle precision junction design. In fact, most of my games don't lend themselves to the control scheme, and I feel like bringing a mouse and keyboard out with me would defeat the object of going portable.

> I JUST CAN'T IMAGINE PLAYING CITIES: SKYLINES ON THE WEIRD TRACKPAD.

Getting back into analog stick-bound games would involve me spending more money on top of that already forked out for the Deck. And being one of those gamers that will happily rotate through a minuscule selection of games, I'm probably not looking to branch out soon. Maybe someday I'll be in the kind of headspace where I'll want to play *The Witcher* at the beach. But right now that control scheme is a bit of a dealbreaker for me.

JACOB RIDLEY

Senior Hardware Editor

When Valve announced the Steam Deck, my first thought was to pour one out for all the handheld gaming PCs that came before it. It wasn't so much the modicum of gaming performance at 720p that had me taken aback so much as the surprisingly low price. While I'm not all that convinced by the effectiveness of a 64GB gaming PC, not even one I can fit in a bum bag, even US$530 for the 256GB version makes most previous handhelds appear like an extravagant luxury.

The more I read about the Steam Deck, too, the more I've started to come around to it as a gaming device. That feels partially down to Valve's experience with failed Linux gaming machines past. Valve appears not to be making the same mistakes twice, and already is showing its commitment to improving Linux on AMD systems ahead of the handheld's launch. If it can get its compatibility layer for gaming, Proton, in order, gaming on Linux should become a breeze in a predominantly Windows PC world.

> THE MORE I READ ABOUT THE DECK, THE MORE I'VE STARTED TO COME AROUND TO IT

So while I'm still not wholly convinced I will cash in my deposit for a Steam Deck sometime in 2022, I have at least made one. I feel that's symbolic of my hope that Valve, at some point, will prove handheld PC gaming a worthwhile venture.

27% DISCO ELYSIUM

39% DISHONORED 2

40% OUTER WILDS

100% TITANFALL 2

Emulate everything

Can one handheld play them all? *By Wes Fenlon*

Why stop your Steam Deck gaming with your Steam library? Dream bigger: Valve's handheld PC will also be able to play retro and modern consoles games thanks to emulators, most of which run natively on Linux. It has the potential to be the greatest emulation device ever made.

"Everyone I know has relatively high hopes for the Steam Deck," said JMC4789, a contributor to GameCube/Wii emulator Dolphin. JMC4789 is optimistic about how well Dolphin could run on the Steam Deck, and so are the developers of Switch emulator Yuzu. "We believe that the hardware should likely be capable enough to run some games pretty well right out of the box, and potentially run Yuzu very well with optimisations to the emulator," the developers said.

Emulators sometimes have issues with AMD's Windows drivers, but it's a different story on Linux. The open source drivers for AMD on Linux are "excellent," according to the Yuzu team, and at the Steam Deck's screen resolution, its GPU will be more than up to the task. Emulation pushes the CPU harder because your processor is doing a lot of work to replicate the behaviour of that different CPU architecture; it's impossible for it to be as efficient as the original hardware. But Zen 2 should be powerful enough to run most emulators with better-than-console performance. Emulators may need UI overhauls to play nice with the Deck's screen and controls, but "the potential is really high," said JMC4789. "The hardware sounds too good to be true, but Valve can kind of get away with selling the hardware at a loss and banking on software sales. A mobile device that's essentially a near gaming PC? If that's what it is, then it'll be great."

ABOVE: *Stardew Valley's* not being emulated here, but isn't this a nice shot of the hardware?

> EMULATORS MAY NEED UI OVERHAULS TO PLAY NICE WITH THE DECK'S SCREEN AND CONTROLS.

SIZE COMPARISON

STEAM DECK
LENGTH: 298MM / **WIDTH:** 117MM / **WEIGHT:** 669G

NINTENDO SWITCH
LENGTH: 238MM / **WIDTH:** 102MM / **WEIGHT:** 398G

SWITCH LITE
LENGTH: 208MM / **WIDTH:** 91MM / **WEIGHT:** 277G

PLAYSTATION VITA
LENGTH: 184MM / **WIDTH:** 85MM / **WEIGHT:** 219G

Image credit: Valve

SUPER MARIO WORLD

on BSNES

1 It doesn't get more classic than *Super Mario World*: it's replayable anytime, anywhere. The PC sadly only saw educational Nintendo games like *Mario is Missing*, but the Steam Deck will easily be able to play the entire Super Nintendo library through bsnes. Here it's running with a CRT filter meant to imitate how the game once looked on a TV. Bsnes creator Near died earlier in 2021, but now other devs have picked up the torch.

ZELDA: SKYWARD SWORD

on Dolphin

2 Sure, there's a newer Switch port, but run the Wii original of *Skyward Sword* by adding Dolphin to your Steam library and you can mess around with Steam Input. The Deck's trackpads and gyro controls should be able to sub in for a Wiimote, but you could also sync an actual Wiimote to the Deck via Bluetooth if you want to get crazy. Having portable access to the entire GameCube and Wii libraries on the Steam Deck is going to be excellent.

METAL GEAR SOLID 3

on PCSX2

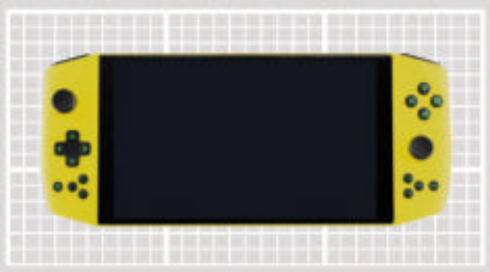
3 *Metal Gear Solid 3* tragically never made it to PC, but it's the best version of the series' classic stealth play and perfectly overwrought cutscenes. The kitschy '60s James Bond feel meshes perfectly with Kojima's style. *MGS3* has the best villains, a genuinely great relationship between Snake and The Boss, and that damn legendary song. Thankfully it runs beautifully on PCSX2, along with most of the rest of the extensive PlayStation 2 library.

DENSHA DE GO!!

on Yuzu

4 What, you don't want to use a Switch emulator specifically to play a Japan-exclusive train simulator? Switch emulator Yuzu is young, but it's already able to run most of Nintendo's first party games like *Breath of the Wild*. While it can't yet run games at higher resolutions like Dolphin, that's perfect for the Steam Deck's 1280x800 LCD. Before long the Steam Deck will run Switch games with nicer frame rates than the Switch.

GDP WIN 3
LENGTH: 198MM / **WIDTH:** 92MM / **WEIGHT:** 550G



AYA NEO
LENGTH: 255MM / **WIDTH:** 106MM / **WEIGHT:** 650G

IPHONE 12 PRO MAX
LENGTH: 78MM / **WIDTH:** 161MM / **WEIGHT:** 228G

GAME GEAR
LENGTH: 210MM / **WIDTH:** 113MM / **WEIGHT:** 558G

Intro

Games

YOUR GUIDE TO THE LATEST PC GAMES.

GAMES THIS ISSUE

065 DEATHLOOP
068 DIABLO II: THE RESURRECTION
070 MEDIEVAL DYNASTY
072 PATHFINDER II
074 LIFE IS STRANGE: TRUE COLORS
076 GAMEDEC

SCORING SYSTEM

PCPP scores its games on a 1 to 100 scale. The higher, the better – though 100 is by no means a "perfect" game. We're not convinced such a thing exists, so consider a 100 a masterpiece of PC gaming, despite its inevitable flaws. A 50 is a decidedly average game; one that doesn't excel in any particular area, without being an affront to our senses – the ultimate in mediocrity. Below this, you'll start to find the games our reviewers suffered an aneurysm getting through; above it, the titles truly worth your time and money. And remember: a score is only a vague indication of quality. Always read the full review for the definitive opinion!

POWERED BY
REPUBLIC OF GAMERS

TIME OF YOUR LIFE

With **DEATHLOOP**, Arkane is rewriting what an immersive sim can be.

By Phil Savage

Arkane Studios is calling me out. It knows how I played *Dishonored 2* – quickloading away any mistake in pursuit of a perfect stealth playthrough. And given that almost 30% of Steam players have the achievement for finishing a mission without being spotted, I suspect I'm not alone. Despite having a suite of tools, we ignored them in favour of the most OP button on our keyboard: F9. With *Deathloop*, quicksave is gone.

Deathloop is all about what happens when things don't go to plan; about panic and improvisation; about learning from a mistake, and taking those lessons forward. Trapped in a time loop, it doesn't matter if you botch your way through combat encounter after combat encounter – it doesn't even matter if you die and get kicked back to the beginning of the day. All that matters is that, in doing so, you gained some information that will help you the next time around.

Information is how you find and kill the Visionaries that act as the bosses of the island. There are eight in total, and your job as the amnesiac Colt Vahn is to take them all out in a single day in order to break the loop. Your problem is that the day is split into four chunks – morning, noon, afternoon, and evening – and you can only visit one of the island's four areas during each period. The Visionaries only appear in certain locations at certain times of the day, and at first it doesn't seem possible to kill them all before the loop resets and your work is undone.

As you dig into the lives of your hit list, though, you'll uncover new ways to manipulate them. This is the bulk of the game, and your progress is tracked and updated as each new lead is uncovered. Colt is one of only two people whose memory remains intact when the day loops, which means his targets' behaviour remains consistent, and thus repeatable. It's immensely satisfying as the pieces start falling into place – as you see the consequences of your actions, and start filling out your itinerary in preparation for that perfect day.

Immensely satisfying as the pieces start falling into place.

The process of gathering information doesn't just apply to your primary objective, either. It turns out that looping repetition leads to a more organic sense of discovery that suits the immersive sim genre well. For instance, my first visit to Aleksis's party in the Updaam district of Blackreef was an embarrassing disaster. It's the most dangerous area in the game – all of the guests are packing heat – and so my botched stealth attempt became a protracted hunt, as I desperately attempted to run and hide, only to be caught anew.

In the end I prevailed, but only after killing everyone in the building. With that done, an opportunity presented itself. I was free to explore in peace; to work backwards from inside the building and discovering the routes that linked them. When I returned the next day, I was prepared. It still descended into chaos in the end, but did so on my terms.

It's clear that *Deathloop* wants to nudge you away from obsessing over a flawless run. When you take out an Eternalist, they instantly fade into a sort of swirling ethereal mist that others can detect and react to. That means you can't spend hours neatly clearing out the map, hiding each body so that your handiwork is never detected. *Deathloop* wants you to be pressured into slipping up; to cause a situation that you're forced to react to. And then, when you do, it lets its weapons and powers feel fun to use, and, crucially, never punishes you for taking advantage of them.

At first, you start each day carrying only the basic weapons Colt has on him when he wakes up. Pretty early, though, you unlock the ability to infuse items – letting you carry them between loops. This is done by spending residuum, a resource harvested during missions or earned by sacrificing other, unwanted bits of gear. Infusion lets you permanently unlock better equipment to use. The best, of course, is held by the Visionaries themselves, who carry high-tier gear and a signature 'slab' – a power in the mould of *Dishonored*'s supernatural abilities.

You're restricted in the number of weapons and slabs you can take on a mission, so if you see something you want in the field, you'll have to swap it with something you're already carrying. Dropped weapons and slabs

NEED TO KNOW

WHAT IS IT?
A stealth shooter set in a time loop. Think *Dishonored* meets *Outer Wilds*.

DEVELOPER
Arkane Studios

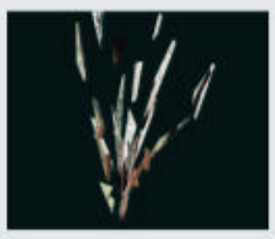
PUBLISHER
Bethesda Softworks

REVIEWED ON
RTX 3080Ti, 32GB RAM, Ryzen 7 3700X

MULTIPLAYER
Yes

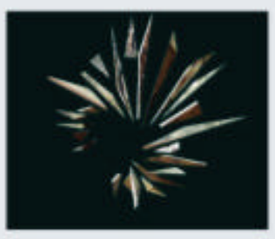
LINK
bethesda.net/en/game/deathloop

SLAB CITY *Your guide to* Deathloop's *powers*



HAVOC
Do more damage, take less damage. Stealth is for losers. Kill 'em all.

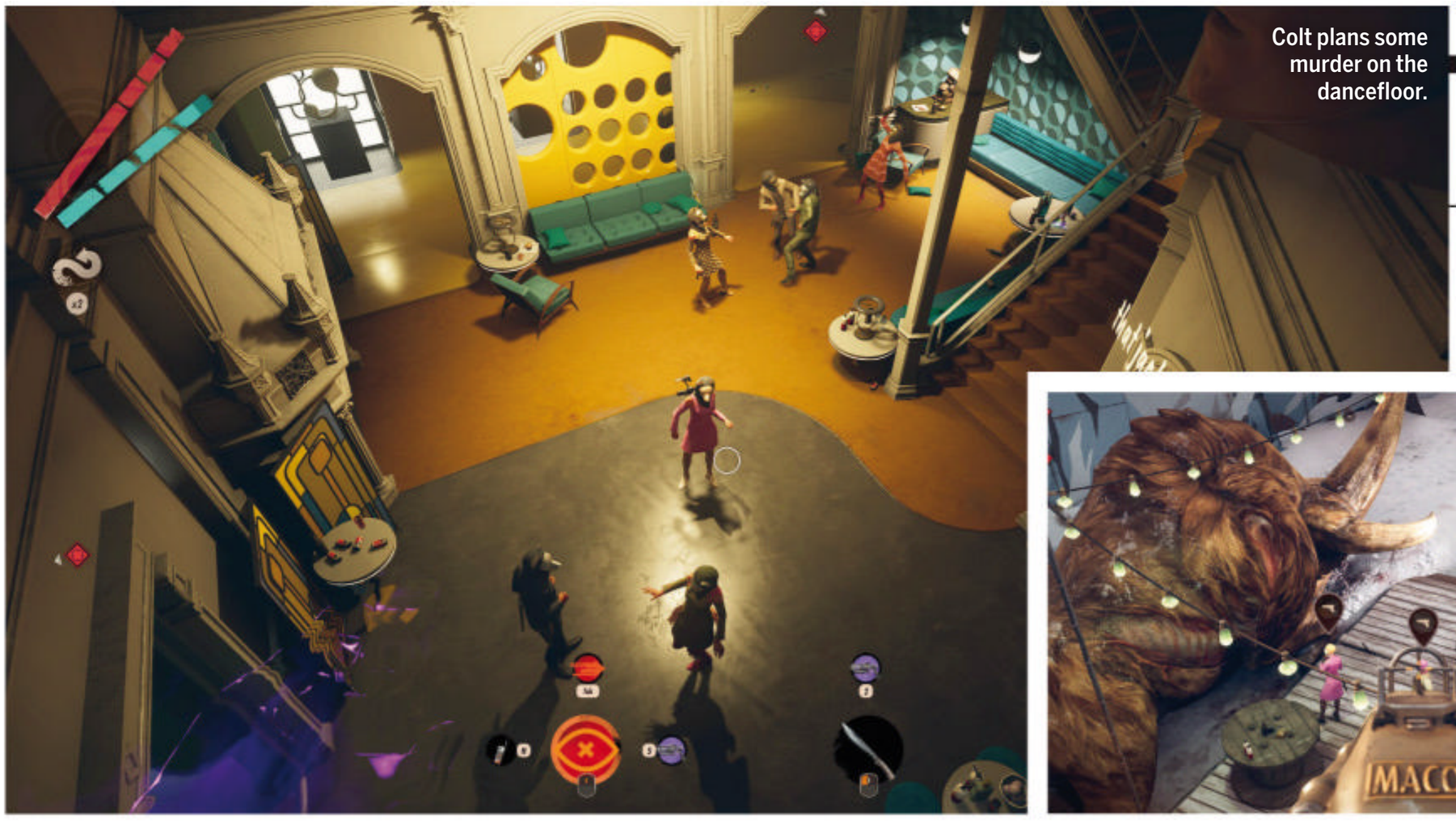
NEXUS
Magically link enemies together. When one dies, they all die. Efficient!



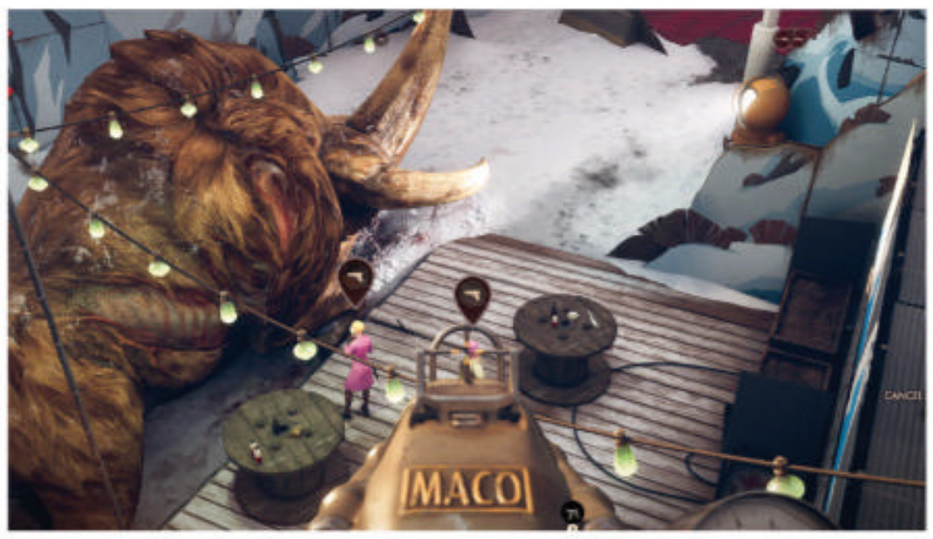
KARNESIS
Fling your foes. Also has an upgrade that makes them explode on impact.

AETHER
Be invisible. As you might imagine, this is pretty useful in a stealth game.

SHIFT
Teleport a short... I don't need to explain this: it's Blink from *Dishonored*.



Colt plans some murder on the dancefloor.



RIGHT: Animated cutscenes track Colt's progress.

FAR RIGHT: A face of pure indifference.

Found a fight? Pop Havoc to keep you going for longer.

are unavailable for the rest of the day. But thanks to the properties of infusion they'll be waiting for you at the start of the next loop.

CHAOS THEORY

Another early power lets you respawn twice on the map without dying and thus resetting your loop. This means you can shrug off the occasional stupid mistake or botched encounter. If you can successfully return to your body without dying again, you can retrieve the residuum off your corpse and carry on as normal. At every stage, the game is telling you not to worry. Enjoy yourself. Don't sweat the mistakes.

At every stage, the game is telling you not to worry. Enjoy yourself.

You see, Arkane Studios is also calling out Arkane Studios; in particular *Dishonored*'s central tension of giving the player a suite of tools for murder and mayhem, but using the story to admonish you for using them. There's no such thing as a non-lethal playthrough of *Deathloop*. Your basic stealth weapons are a machete and a nail gun. Colt's idea of a silent takedown is snapping an Eternalist's neck.

You can tell that *Wolfenstein*'s MachineGames played a role in *Deathloop*'s development. The guns are chunky, powerful, and cacophonously loud. That said, the increased focus on violence and combat does accentuate some weaknesses in the AI. It can be easy to cheese combat encounters, using corners or doors to funnel enemies into a killzone. But between the guns, the tools, the more combat-focused slabs, and the free respawns, it just feels more exciting to embrace the chaos and wade into the mess.

Throughout the game, there's a voice telling you that, actually, you love this. That's not me making some grand point about the duality of man or something: there's literally a voice – one coming from the other end of your radio each time you step into a new level. It belongs to Julianna, the other person on the island whose memory persists through each day. Her job is to protect the loop by hunting and killing Colt. And it's a task she revels in.

This cat-and-mouse relationship is the heart of *Deathloop*'s story, and enhances the mystery of the loop, the island, and Colt's past. As antagonistic as their conversations are, it's also clear Julianna enjoys their game. At one point she clarifies to Colt that she doesn't love watching him die, she simply loves killing him. There's a playfulness to her goading, but also an underlying frustration that makes uncovering the past that Colt can't remember very intriguing.

INVADERS MUST DIE

Julianna's hunts are also the final piece of *Deathloop*'s systemic puzzle, the thing that ties its various riffs on the immersive sim genre together. She can invade any level that contains a Visionary, and – if you play with online enabled, at least – will be controlled by another player. With an entire level as your playground, this leads to some incredibly tense encounters, but also plenty of slapstick shenanigans. Once, a player invaded me but didn't realise I'd already hacked some of the nearby turrets. They spawned, I heard a turret start to fire, and moments later the game told me Julianna had been killed.

Colt is more heavily favoured in these encounters, because Julianna can't respawn when killed. Ultimately that imbalance is for the best. For Colt, the stakes are higher. Dying during the loop means losing access to any weapons or upgrades he gathered during that level – as well as any picked up earlier in the day that haven't yet been infused. As Julianna, meanwhile, your progression is tied to feats performed during your hunts. Even if you don't end Colt's day, a decent performance will still net you points towards unlocking more weapons, powers, and upgrades.

Ultimately, most Julianna encounters are resolved in an open firefight, which is the key to why so much of *Deathloop* is constructed the way it is. Why can I only equip a handful of weapons and powers? Because building a loadout is more interesting if Julianna is a potential threat. As the game progressed I started to favour a loadout that counterplayed an invasion: equipping slabs like Aether, which turn Colt invisible, and guns that would be overkill for a basic Eternal, but offered damage-over-time effects that could panic a human player.

For the first few hours of *Deathloop*, I was more interested in it as Arkane's response to *Dishonored* – a series that I love. I was enjoying myself, and looking forward to uncovering the mysteries of the island, but was more intrigued by what Arkane was saying about the genre as a whole, and about the way people played its previous games. It wasn't until another player invaded my game that it all clicked together, and I started enjoying *Deathloop* on its own terms.

After around 25 hours, I may have completed the story, but I'm still not done: I want to complete the remaining puzzles to see what new weapons and upgrades are out there, and learn how they can help my fight against Julianna in the future. And I want to see how the hidden routes I discovered as Colt can help me be a better invader against other players less familiar with the levels. Colt might be determined to break the loop, but I'm not in any rush. ■

BAY AREA

Welcome to Karl's Bay

1 The Yervha machine asks you trivia questions about the island. Does a great prize await you if you answer them all? No.

2 This is better: at night, Charlie runs a game that asks you to find explosive boxes for... reasons. There's a new gun for doing so.

3 Oh no, Julianna has invaded and the tunnels have been locked, blocking your escape. Hack the antenna to flee the area.

4 There's a lad on this cliff playing the guitar throughout the day. I like to just leave him be. He's not hurting anyone.

5 This hangar is where Harriett gives a sermon to her cult. Since Harriett is one of your targets, you'll visit a lot.

PC PowerPlay VERDICT

An entertaining stealth shooter in its own right, but it's the multiplayer invasions that make *Deathloop* sing.

89

HELL AND BACK

DIABLO II: RESURRECTED is a proud love letter to one of the greatest RPGs of all time.

By Luke Winkie

D*iablo II: Resurrected* moves at two speeds: You are either carving through swathes of undead with impunity, or you're navigating each fork in the road with taut reluctance, nursing the small puddle of red in the bottom left corner of the screen. Action-RPGs are a known quantity in 2021, so what I most appreciated about my return to Blizzard's classic was the way it made me fear the dark again, with no friendly checkpoints to save me.

Diablo II came out in 2000, and *Resurrected* represents the first new game in the franchise since the release of its sequel in 2012. The basics are all in place. You will take control of a lonely warrior – picked from one of seven different classes – who are condemned to wander Blizzard's arid, Old Testament wasteland. The game is divided into five different acts, each with their own hub that sprawls out into a procedurally generated universe. Step into the wilds and complete quests, plunder chests, and click zillions of cloven-hooved demons to death. *Diablo II* took over countless lives at the turn of the millennium, and it's still deeply compelling in 2021.

That's probably my favourite thing about *Diablo II: Resurrected*. The modern games industry is frequently saddled with depressing, metatextual stat grinds, but this remaster is proud to be a dinosaur, and Blizzard has offered no monetary retrofitting around the edges of *Diablo II* to bring it into the 21st century. In fact, every single change in *Resurrected* is whipsmart and exceedingly subtle. No longer will you be forced to create sad, brutish characters who serve only as an inventory mule for your mains. The player stash is shared across the account, where weaponry passes unburdened between your Druid, Necromancer, Amazon, whatever. Tired of scraping up the piles of gold coins from the corpses in your wake? *Diablo II* adventurers soak those up automatically now, adding a faint dash of idle-game efficiency to Sanctuary. Have the decades since high-school burdened you with back pain? Lean back grandpa, and enjoy *Resurrected* with a gamepad.

Lean back grandpa, and enjoy *Resurrected* with a gamepad.

Blizzard has reupholstered much of their back-catalogue to varying degrees of success, (looking at you, *Warcraft III: Reforged*) but there is a tender attention to detail in this new version of *Diablo II* that exceeds what's available in those other efforts. At any moment, players can tap the G key to shift back into the original art and witness all of the airbrushing. I was often surprised at what I found. Streams of putrid water run through the sewers of Lut Gholein, and after a brief investigation, I found that they simply didn't exist in the game files back in 2000. It's amazing what is possible, when everything isn't rendered in 800 by 600.

INFERNAL AFFAIRS

And yet, despite all of those innovations, there's a voice deep within me that wishes *Resurrected* went a few steps further. I am a radical when it comes to my remasters, and I love and respect all of my hardcore *Diablo II* lifers who want their dungeon-crawl dipped in

NEED TO KNOW

WHAT IS IT?
A twitchy action-RPG at the gates of hell

DEVELOPER
Blizzard

PUBLISHER
In-house

REVIEWED ON
Windows 10, GeForce GTX 1070, Intel Core i7-9700 CPU, 16GB RAM

MULTIPLAYER
1-8 players online

LINK
diablo2.blizzard.com/en-us

CLASS DISMISSED *The official, objective, 100% correct ranking of the* Diablo II *classes*

1 AMAZON
When all else fails, the spear lady reigns supreme.

2 BARBARIAN
Perfect for playing *Diablo* like its an idle game.

3 DRUID
We've always appreciated his Paul Bunyan look.

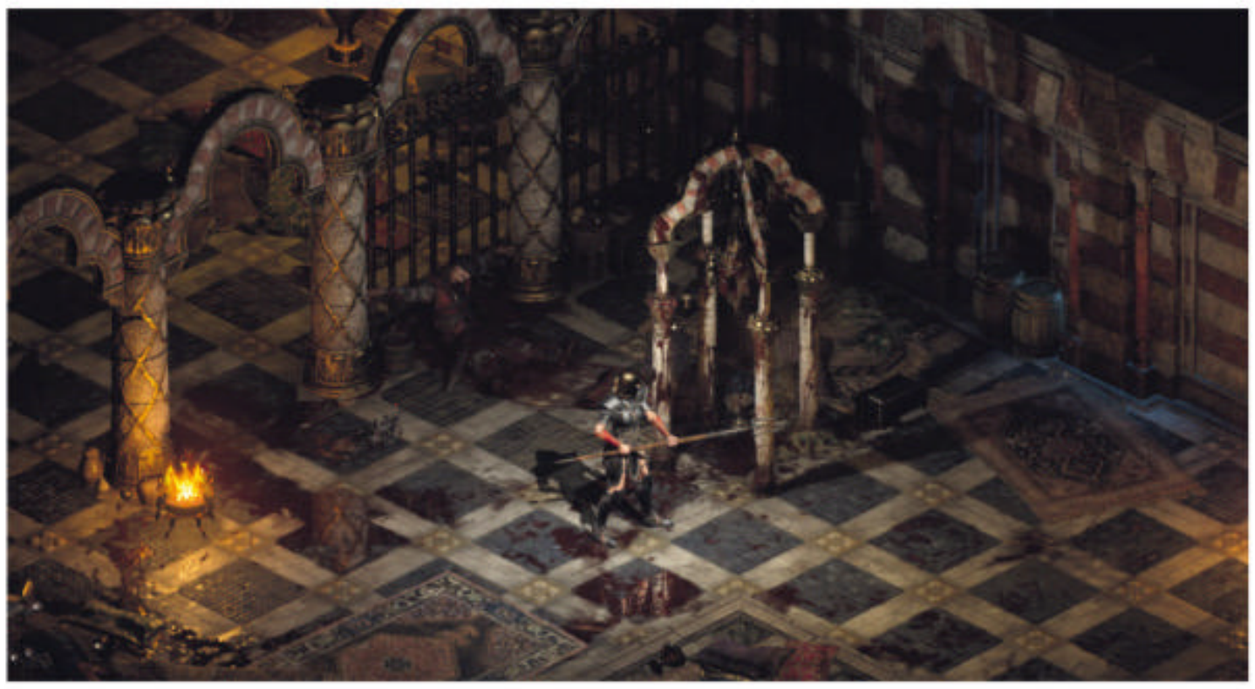
4 NECROMANCER
Cool, but we're trying to leave our goth phase in 2000.

5 SORCERESS
Enjoy getting hard-stuck in Act II, you fool.

6 ASSASSIN
Skulking around in the shadows? Come on now.

7 PALADIN
My man, this is *Diablo*. There is no salvation here.

Blizzard has done an incredible job with the lighting.



Through time and space, *Diablo* is eternal.

ABOVE: You won't find any rainbows here.

RIGHT: The gore has never looked better.

formaldehyde and capable of returning them to the exact spot where they last left their happiness. But still... does our inventory really need to be this small? Are the constant corpse runs, where we must pluck our displaced gear off our bodies, all that necessary? These are the questions of someone who is not a hardcore *Diablo II* head, and it is clear where *Resurrected's* allegiances lie. This is not a video game designed to inaugurate a fresh generation of Tristam survivors – that duty is surely left to the forthcoming *Diablo IV*. Instead, the players gathered here have all been playing *Diablo II* for years, and now they have a prettier, smoother, and slightly less finicky version to enjoy. Is there a universe out there where *Diablo II* is reborn with a from-the-studs change of philosophy? Absolutely, but that brutally misses the point. This is a celebration of one of the greatest RPGs of all time; the revellers don't want you to ruin the mood. ■

PC PowerPlay VERDICT

Diablo II: Resurrected **combines a beautiful new look and some smart innovations to deliver a great take on a classic.**

80

RESISTANCE IS FEUDAL

MEDIEVAL DYNASTY makes doing chores for everyone else fun.

By Jason Coles

Having put the finishing touches on the fourth building in my little village-to-be, I realise I need to go out hunting to get more food for the few denizens that dwell within it. It's my job to look after them, after all, and that means building shelter and services, but also going out to hunt some bison or deer for meat. I feel pretty confident as I head out... but end up dying to a boar taking a bite out of my ankle.

This moment helped give me the respect I needed for the world of *Medieval Dynasty*, because while it looks tame and feels like an RPG a lot of the time, it still has the heart of a survival game.

Progressing means learning to balance the gentler and harsher aspects of the game.

Things can get a little odd where the two meet. You gain levels in the different skillsets, for example, by doing those activities over and over – in theory encouraging you to go out into the world and try out the skills you want to master. In practice you end up with a lot of spoons.

Remember the similar system in *Skyrim*? Where you ended up grinding up your blacksmithing skills by filling your bags with a ridiculous number of daggers? Basically imagine that, but instead of working towards magic swords, you just want to make a shovel, and instead of forging daggers you're whittling spoons out of sticks. On the other hand, it was genuinely really exciting once I did get the shovel. Now I can dig up the stump after I cut down a tree!

Progressing means learning to balance the gentler and harsher aspects.

This game isn't just about keeping yourself alive though. It's called *Medieval Dynasty* for a reason. You need to start your own little town, and keep building it up from being a single house for you to sleep in to a bustling rural metropolis full of people with different jobs that you have to keep fed, watered and warm.

Assigning jobs means they'll help out with resource gathering and stuff as well, but you're the one in charge. I assume this is what it's like to be a manager – or at least what it would be like if along with assigning work you also had to give your employees the ingredients to cook their dinner, and firewood for their cosy home that you built with your own hands.

NEED TO KNOW

WHAT IS IT?
A medieval survival RPG management sim

DEVELOPER
Render Cube

PUBLISHER
Toplitz Productions

REVIEWED ON
GTx 1070 Dual OC,Windows 10, Intel Core i5-7600k, 16gb Ram

MULTIPLAYER
No

LINK
toplitz-productions.com

HARD TIMES

Medieval Dynasty has some pretty comprehensive difficulty sliders that allow you to do things like remove temperature as a concern entirely, or massively reduce or increase the amount of food people need to live. You can even stop bandit attacks if you want to live in a world where people are nice all the time, or make seasons as long or as short as you want. It's a surprisingly accessible approach, and the ability to remove and alter so many things means you can either play this as a brutally difficult game where you're constantly against the clock, or turn it into a casual chillout session akin to a grittier *Animal Crossing*.

But even with things set to be a little more brutal, *Medieval Dynasty* still feels as though it's been designed as a second life, rather than a fantasy one. You're meant to go about your tasks and keep everyone happy and safe, rather than building up to trying to slay dragons or visit other worlds. It's really quite relaxing. Less relaxing, though, is the fact that the game doesn't always do a great job of teaching you things, and there's an awful lot to learn here. You'll often have to consult the in-game 'Knowledge' tab to be able to learn what you're meant to be doing.

Medieval Dynasty isn't necessarily the most exciting game out there, but it's comforting. It's the kind of thing you can jump into for an hour or so a night and see your progress in the form of a new building, or a brand-new member of your very own village. Or jump in expecting a quick visit and find yourself losing four hours to it, emerging from a trance with a warm fuzzy feeling in your stomach. ■

PC PowerPlay VERDICT

Medieval Dynasty is a fun and relaxing survival game/RPG, but it can lack a little bit for exciting moments.

74

HOG WILD

The anatomy of a

1 HATE-FILLED EYES
You may not remember the sins of your past, but every boar in *Medieval Dynasty* does, and they want you to suffer.

2 HOMING PAIN TUSKS
These things will hit you so hard your entire dynasty will suffer for it.

3 REAR END
It smells bad, and in about 12 hours time it's going to poop out your digested remains.

4 CUTE, FLUFFY BACK
It's easy to get distracted by the fact that these furry pigs are, well, furry pigs, but touch this and you will know only pain.

LEFT: A special vision mode helps you see resources, like a smelly Batman.

FAR LEFT: Your village grows as fast as your hands can move.

BELOW LEFT: Why hoard gold and diamonds when you can have spoons?

HIT AND MYTH

PATHFINDER: WRATH OF THE RIGHTEOUS is so dense it's got its own gravity.

By Jody Macgregor

The first boss in *Pathfinder: Wrath of the Righteous* is character creation. It's as daunting as any multi-limbed demon. There are 25 classes, most subdivided into six archetypes. There are prestige classes you can't choose until later, which show up here if you want to plan your build around one. You choose a race, heritage, background, religion, skills, feats, maybe an animal companion, which gets its own class, skills and feats.

At the end of this process you may well end up with a character who is completely inappropriate for getting what you want out of *Wrath of the Righteous* and, several hours later, want to restart or respec.

Your character, whether a rage-powered bloodrider with a pet smilodon, a halfling knight who charges into battle on a dog, or just an elf who is a wizard – that's cool too – is off to join a crusade against the demons of the Worldwound. These demons marched through a hole in reality years ago and have been making a mess of the place ever since. Eventually, you'll become the crusade's commander and a mythic hero with incredible powers.

This happens in an isometric RPG that evokes *Baldur's Gate* so much sometimes I walk under a patch of autumn leaves and think I'm back on the Sword Coast. If you played *Pathfinder: Kingmaker* you'll be familiar with the effect, though this isn't a sequel to *Kingmaker* and is in fact a better introduction to the *Pathfinder* rules. Owlcat Games has learned that tutorial pop-ups are good and boxes of text will warn if you equip items with bonuses that don't stack or goof up the rules of the tabletop RPG it's based on.

You'll become the crusade's commander and a mythic hero.

In an underexplained side game, your crusaders fight on a grid while their oversized general looks on from the left and occasionally casts a spell, like that one person in every group project who acts like they're contributing but isn't really pulling their weight, throwing some glitter across the poster board while the actual soldiers fight and die.

This strategy layer is a significant and demanding timesink. You have to chip away at units representing hundreds of troops for turn after turn, long after it's obvious you've won. Once I figured out the best tactics – ignoring opportunities to collect handfuls of useless specialists who just clutter the map in favour of building doomstack units of high-damage troops several hundred deep, then camping archers in the corner surrounded by knights – it stopped being such a hassle.

I suspect each companion will be someone's favourite, whether they prefer the ones who subvert stereotypes (a paladin who loves drinking and chill hangs, a pragmatic victory-at-any-cost hellknight who is also a gnome), or the ones so exaggerated they came straight from anime central casting (a witch-girl whose pure innocence makes cultists change their ways, a wizard who treats people like experiments).

The mythic paths are uneven too. These routes to demigodhood are sprinkled throughout *Wrath of the Righteous*, and when you choose one it bolts another layer of levelling on top of the complicated character you've made. These can turn you into anything from a demon to an avatar of law who is basically a time-travelling Judge Dredd, and you eventually get an option to switch to another mythic path if you want to try more. Some are tightly integrated with the rest of the game, like the angel path, where others feel like afterthoughts.

Then there are the bugs. While I didn't hit many in the early chapters, later on they were frequent. It's nothing compared to how buggy *Kingmaker* was at launch, but it's frustrating to see problems mount after relatively smooth early chapters.

NEED TO KNOW

WHAT IS IT?
An ambitious CRPG that follows the zero-to-hero formula then keeps going

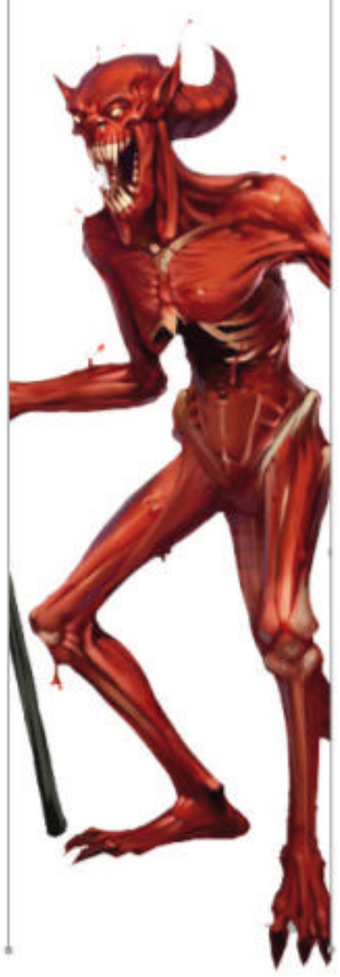
DEVELOPER
Owlcat Games

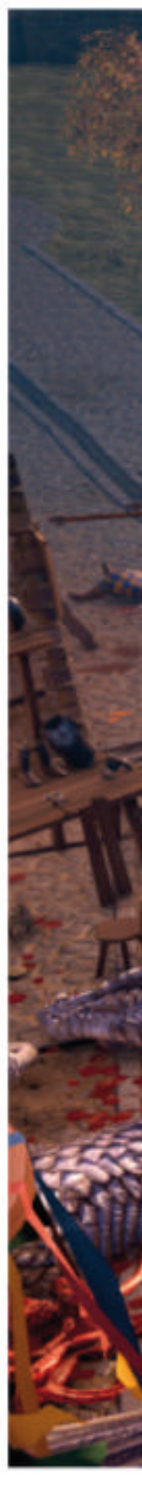
PUBLISHER
Meta Publishing

REVIEWED ON
Windows 10, Intel Core i7, 16GB RAM, Nvidia GTX 1060

MULTIPLAYER
No

LINK
wrath.owlcatgames.com





PC PowerPlay VERDICT

Pathfinder: Wrath of the Righteous **is a long game of choose-your-own-chosen-one with highs to balance the lows.**

76

PATHS TO ADVENTURE

Other* Pathfinder *campaigns that could make fun videogames

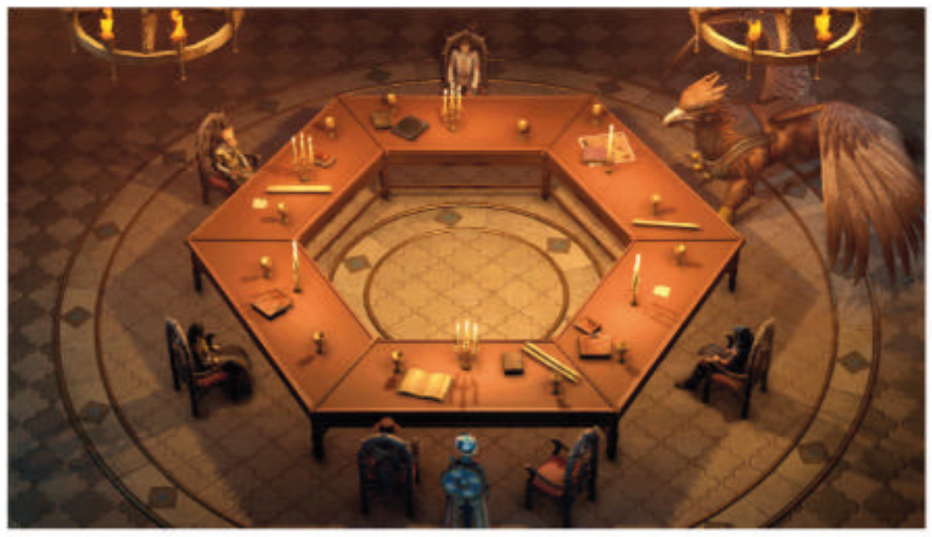
SKULL & SHACKLES
Become captain of a pirate ship, win a regatta, build a fleet, claim the throne of the Pirate King.

HELL'S REBELS
Join an uprising against a tyrant, forge alliances with other free peoples, defeat the inquisition.

COUNCIL OF THIEVES
Rob a decadent city's paranoid rulers, survive a deadly feast, and perform an even deadlier play.

REIGN OF WINTER
Steal Baba Yaga's hut, travel through time and space in it, arrive on Earth, and fight Rasputin.

A zombie bear, how tough can it be? Turns out, very.



FAR LEFT: "Anybody else a Slayer fan? Just me?"

LEFT: Floor-tile puzzles can go to hell.

The lord of locusts spends a lot of time at the gym.

EMOTIONAL BAGGAGE

Discover a new kind of emotional intelligence in LIFE IS STRANGE: TRUE COLORS.

By Rachel Watts

There's a moment in *Life is Strange: True Colors* where protagonist Alex angrily throws a bottle across a room and it smashes against a wall. Her rage is white-hot and only lasts an instant before melting away. Her brother, the only family she has, is dead and she's now just discovering his death might not have been an accident. The pain is too much and it overwhelms her. *True Colors* is about the power of emotions – both good and bad.

Where the series has previously dabbled in time travel and telekinesis, Alex's superpower is that she can see people's heightened emotions and even absorb them into her body, relieving them of their anger, sadness, and anxiety if she chooses. If a person is feeling an overwhelming emotion, she can see their auras and understand what they are going through. She's basically a human mood ring.

After spending her entire teenage life in foster care, her estranged brother Gabe manages to get in touch with her and invites her to live with him in Haven Springs, Colorado. But then he tragically dies, and Alex begins to feel like it could be connected to sinister goings on. She starts investigating the tranquil mining town to find out what really happened, using her powers to see the townsfolk's true nature.

Life is Strange sure does love quaint American towns, and *True Colors*' Haven Springs slots into its tour of the US nicely. Deck Nine has continued *Life is Strange*'s exploration system, where you interact with various people and items to get more information about the world. But what makes it feel refreshing in *True Colours* is it's the first time you get to know more about the game's protagonist than anything or anyone around her.

We get to know who Alex is as a person, her history and her strengths.

Before you meet her, Alex has already lived an eventful life, and we learn this from her diary entries when she was in foster care, and through letters from friends who got adopted. It's not often we get to play as a character who has been through the foster care system, let alone someone who has been traumatised by it, and Deck Nine handles her situation with great care. We get to know who Alex is as a person, her history, and her strengths.

NEED TO KNOW

WHAT IS IT?
A coming-of-age adventure about a young woman who can feel the emotions of those around her

DEVELOPER
Deck Nine

PUBLISHER
Square Enix

REVIEWED ON
AMD Ryzen 5 3600, 8GB RAM, Radeon RX 5700 XT

MULTIPLAYER
Nope

LINK
lifeisstrange.square-enix-games.com

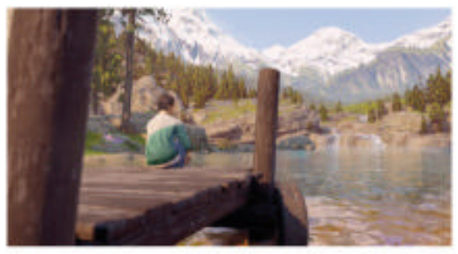
FEELIN' FINE

Alex's empathetic superpower is worked into exploration, too. People leave a mark on items they're connected to, and Alex is able to tap into that and find out more about a particular person – their thoughts, their emotions. Picking up something like a mug could reveal that someone is suffering from work stress, or holding a phone might expose the owner's anxiety about receiving a particular call. Although there are moments where the power's logic feels inconsistent, it always fits nicely into the overarching story.

Life is Strange is known for its choices and the drama that ripples from them, but I didn't really get that feeling in *True Colors*. There are important decisions, but you only see the payoff at the end of the game,

TOP: Alex is one of the best characters in the series to date.

You can read the thoughts and emotions of NPCs.



TOP: A quiet little town with a dark secret. Classic!

ABOVE: It's basically Haven on Earth.

which is a long time to wait to see how your choices turned out. On the positive side, one of these end game decisions is whether to romance either the beanie-wearing Steph or park ranger Ryan, so it's great to see Deck Nine continuing *Life is Strange*'s positive queer representation with the openly bisexual Alex.

Although *True Colors* has its pitfalls, I've never had this much fun with a *Life is Strange* game. Previous games in the series have dealt with some heavy topics, like suicide and racism, so even when there are happy moments, they often come across as a fleeting moment in an unfair world. *True Colors* has its fair share of drama, but it also has moments of incredible joy. The whole emotional spectrum is present, and Alex experiences them all deeply within a story that respects those feelings.

To see Alex throw that glass bottle across the room in anger at her cruel circumstances is incredible and heartbreaking – an emotional gut-punch. *True Colors* is full of these moments. It's a story that lets a young queer woman unashamedly cry, scream, and be joyful free from shame, and that's incredibly special. ■

PC PowerPlay **VERDICT**

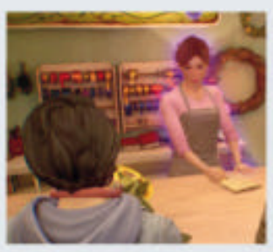
Visually gorgeous and emotionally raw, *True Colors* is an incredible continuation of the *Life is Strange* series.

86

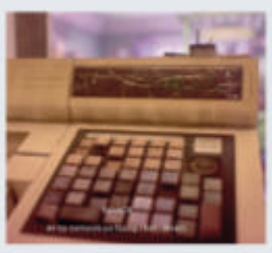
Fear, anger, and frustration are just part of being human.

POWER TRIP

Alex can use her psychic abilities in a number of ways



AURAS
Alex can tell how a person is feeling from the colour of their aura.



SENSE
Items hold the thoughts that characters associate with them.

ABSORB
Taking away a person's emotions relieves them, but can have repercussions.

SURROUNDINGS
Alex is able to see the world around her as another person perceives it.

GAME OVER

GAMEDEC is a cybersleuth RPG that wastes its great premise.

By Fraser Brown

In the days before the ubiquity of the internet, stumped gamers would sometimes phone a tip line for a bit of life-saving advice. Nintendo's 'game counsellors' in particular had a near-mythical status, and a gig that every kid dreamed of having. The reality was less impressive, less glamorous, but the idealised version – encyclopaedic knowledge of games, completed *Battletoads* blindfolded – lives on in *Gamedec*, where they serve as fixers in virtual worlds.

The childhood fantasies that most RPGs trade in are long established, but *Gamedec*'s setup is a more modern brand of wish fulfilment. As one of the titular gamedecs, you're a gamer who is just so good at games that you can hop between virtual worlds fixing problems and solving crimes. It's silly, but also grounded, creating a web of themes that feel much more relevant than any demonic invasion.

Though you can only play as a gamedec, you've got a life beyond the gig, other professions, opening up new options that can break a case. These are your skills. As an infotainer, I use my fame and inauthentic charm to impress fans, making them easier to interrogate. Infotainers have other tricks, too, and expert knowledge that comes in handy in a surprising number of situations.

It's an intuitive system where the way you roleplay is reflected in the skills you're able to acquire, but there's a lack of consistency. You've got four personality types made up of eight themed aspects, and it's by making decisions that increase them that you get new points for your professions. I've noticed several occasions where aspects go up for seemingly unrelated actions, however, while all the times I've selected the most chill options have done nothing to increase my calm stat.

It struggles to hold all the disparate threads together.

This is a bit of a problem for a game touting its extreme reactivity. A lot of the time it reacts in ways that make sense, but it sometimes struggles to hold all the disparate threads together. This culminates in other oddities, like characters responding to you as if you'd said something entirely different, or responses that are missing entirely.

NEED TO KNOW

WHAT IS IT?
A cyberpunk RPG where you're a gamer detective

DEVELOPER
Anshar Studios

PUBLISHER
Anshar Publishing

REVIEWED ON
GTX 1080 Ti, Intel i7-8086K, 16GB RAM

MULTIPLAYER
No

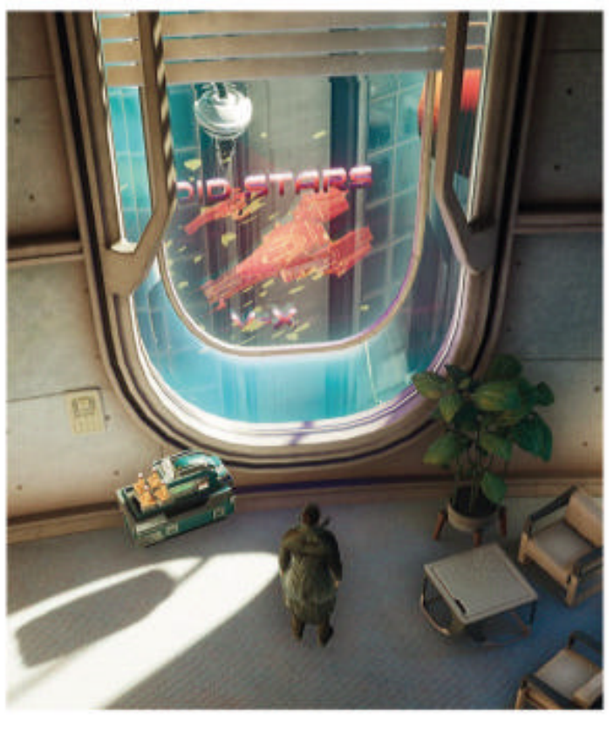
LINK
gamedec.com

ON THE CASE

Gamedec's cases are a lot more unusual than your typical RPG fare. A missing person stuck in a digital world built on fetishes, a group of virtual farmers being exploited in a free-to-play game, an MMO clan that's grown into a huge cult – they all use elements of conventional mysteries and then take them to unexpected places, skewering things like game monetisation.

By exploring these virtual realms and doing your detective thing you'll uncover clues that will lead to a variety of possible deductions. It's not possible to find every clue, but it's also impossible to get stuck. If you aren't able to solve one part of the mystery, you'll still have skills that will let you solve other parts.

The cases are unfortunately accompanied by writing that never finds its groove. For every bit of confident prose there are paragraphs

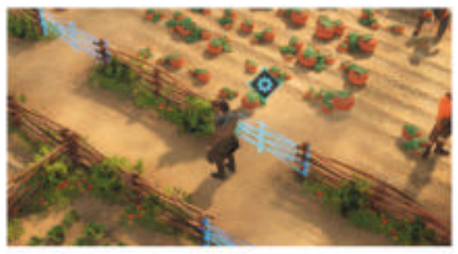


ABOVE: Every hard-drinking gamedec needs a loyal servobot to help them out.

TIMMY
He nodded vigorously. I think he liked me.
1. [Ask about the virtualium]
2. [Ask about Fredo]
3. [Talk about Tim]
4. [Send him home]
5. [Stop the conversation]

It's good to make friends at crime scenes.

This is normally how I introduce myself to new people.
Quest Log
Perform a deduction and present your hypothesis
ZIRO
[Infotainer] What about the net? You haven't seen me there? I'm pretty popular, I've got thousands of followers.
Continue



ABOVE LEFT: Harvest Time is a F2P farming sim with a seedy underbelly.

ABOVE RIGHT: Gamedecs are not the best dancers, but they try.

full of typos and stilted dialogue. I wish it had more to say, too, but it just skims the surface of its issues, and those themes are subsumed by a conventional sci-fi plot.

You're bombarded with choices, but it feels like you're only reacting to obstacles the game throws in your way, rather than getting into some engaging freeform investigations. And then you're yanked to the next bit. Given how brief it is compared to most RPGs, the change in pace and focus is even more jarring.

It didn't help that bugs required me to play through several sections again. There are broken quests, conversations that trap you in a dialogue box forever, animations that leave you stuck in mid-air, and characters you can't interact with but are still told to interrogate. The English translation also leaves a lot to be desired, and at the time of writing remains incomplete.

Gamedec had heaps of promise, but the bugs, inconsistencies and that jarring pivot leave it feeling rushed and confused. And it's all the more disappointing because it's so obvious that there's a great game in here – it just didn't get finished. ■

By this point in the game I contemplated jumping.

PC PowerPlay VERDICT

Gamedec is half of a good RPG, but unfortunately falls far short of its very tantalising premise.

58

PROFESSIONAL HELP

The professions you can pick straight away

SCALPEL
Your medical skills make you great at interrogating docs and using medical equipment.

INFOTAINER
Your charisma can charm answers out of people, and you can boast about your follower count.

SLEEVES
You're a dickhead, which comes in handy when you want to intimidate someone.

GLAZIER
Hack real and virtual tech to crack cases, tweak developer stacks, or just tell an ad drone to piss off.

Intro

Tech

YOUR GUIDE TO PC GAMING HARDWARE.

PC PowerPlay POWER AWARD

Our Power Award is given to products that are best in class no matter your budget.

PC PowerPlay SMART BUY

Our Smart Buy Award goes to products that balance performance with price tag.

GEAR THIS ISSUE

079 CORSAIR VIRTUOSO
080 MICROPHONES GROUP TEST
084 WEBCAMS GROUP TEST

THE PCPP TESTBENCH

CPU INTEL I7 7700K INTEL.COM.AU
MOBO ASUS Z270 ROG CROSSHAIR VI HERO ASUS.COM.AU
RAM 2 X BALLISTIX 8GB DDR4-3200 CRUCIAL.COM
PSU CORSAIR 850W PSU CORSAIR.COM
COOLING H105 CORSAIR COOLER WWW.CORSAIR.COM.AU

GAMING AUDIO HEADSET

Corsair Virtuoso RGB Wireless XT

The Swiss army knife of gaming headsets.

PRICE $429 **ONLINE** www.corsair.com

Everything. That's what I imagine the answer was when Corsair asked what it should build into the new Virtuoso XT headset. Just make it do everything. And sure enough that's what it did. Rock-solid wireless capability? You're covered. Bluetooth connectivity? Of course. PlayStation Support? Yep. High fidelity 24bit/96kHz audio? Pfft, do you even need to ask? Even the venerable 3.5mm jack makes a return.

The XT is a good-looking headset with a subdued but stylish design that sits equally comfortable in a business-class flight lounge or your next esports tournament. An aluminium chassis and machined edges give the XT a lovely premium look. The earcups include an adjustable RGB Corsair logo, allowing you to go full gamer. You can also disable the RGB if you want to be more subtle. In combination with the removable mic arm this allows the headset to blend into any environment, whether gaming or everyday use.

Comfort is great too. The headband is nicely padded and supports plenty of adjustment, with marked notches so you can easily adjust back to a known position. The round memory foam earpads sit comfortably against your head and are big enough to ensure a good fit in most cases.

I never had any issues with fatigue or discomfort while using the XT. While I do have fairly large ears I had no issues with them touching the earpads. But earpad fit is personal, and conveniently the XT supports replaceable earpads with a range of aftermarket options if the standard fit doesn't work for you.

So it looks good, is comfortable, and can connect any conceivable way. But how does it sound? In my view the XT is one of the best gaming headsets in terms of audio quality. Its two 50mm neodymium drivers provide clear mids and crisp highs coupled with reasonable bass. For my personal taste the very low bass range needed a bit of a boost, and the mids were a bit overrepresented. But both were easily adjusted with a tweak in the software EQ.

The mic is in a different league to other gaming headsets. I use voice recognition extensively, and noticed a marked improvement in the percentage of recognised commands when using the XT. My online friends also commented on the improved mic quality as soon as I switched.

The XT requires Corsair's iCUE app to control the headset's RGB, EQ and other settings. For some this will be an issue as not everyone is a fan. Not running iCUE means you forgo RGB, which is fine, but it also means you cannot apply a custom EQ, which is a big loss. Luckily the 'do everything' XT does provide another option. It ships with Dolby Atmos, which allows you to apply EQ settings via the Dolby Access app (so no need to run iCUE), while also providing great spatial audio.

The one feature I initially missed on the XT was the ability to separately control game and comms audio (e.g. Discord) from the headset. This is a very useful feature of my current GSP670 headset and as standard is missing from the XT. But the Swiss army knife XT again comes through with an alternative solution. It supports simultaneous wireless and Bluetooth audio, with independent control on the headset for each. So set up comms audio over Bluetooth and game audio on wireless and hey presto – separate controllable game and comms audio. Even better, you can run Discord on your phone, removing one more background app from your gaming PC. Now that's cool.

Well played Corsair.

PETE VEEDUB

PC PowerPlay VERDICT

The Corsair Virtuoso XT is an extremely versatile headset combining great audio with every conceivable type of connectivity, in a form factor and design that foregoes the typical gamer aesthetic for something that can be used anywhere for anything.

80

GROUP TEST

BUDGET MICROPHONES

You don't need to spend a lot to whisper sweet nothings over the world wide web.

By Jorge Jimenez

The phrase 'best cheap microphone' is no longer an oxymoron. One of last year's most surprising hardware trends was the rise of budget streaming microphones, with brands like Rode and HyperX getting in on the action with stripped-down mics that focus purely on sounding great at low cost.

The catch is that some of these cheap microphones will be lacking some common features you might find for more cash, like volume control. Hell, a lot of these budget mics don't even have a mute button. The idea is that you can do all that with third-party software like OBS or Xsplit instead.

Yet while some might be turned off by a lack of extra features, the sound quality and low price more than make up for it in our eyes. These cheap mics give the budding content creator everything they need to get started.

1

SoloCast

HYPERX **$89**

Simply awesome.

1 The HyperX SoloCast is a budget microphone that sounds just as good as, if not better than, microphones available for double the price. It's less flashy than HyperX's more out-there microphone, the QuadCast S. I won't lie, I miss the RGB lighting. However, the sound quality on this mic is just incredible for the money. Even when comparing the two, the sound quality is scarily similar when using cardioid mode across both.

So it more than makes up for losing out on some of the quality-of-life features. It does well against the competition too – while the JLab Audio Talk GO and Razer Seiren Mini offer great sound, the HyperX SoloCast still reigns as the king of budget microphones. It gives us the audio chops of its pricier QuadCast S compatriot but for a fraction of the price, and with portability and simplicity it's ace for gaming or streaming.

Quality streaming gear at more affordable prices means that more people can easily create that sweet content.

PC PowerPlay **VERDICT**

- Sounds nearly identical to QuadCast
- Great price
- Portable design

SPECS POLAR PATTERNS: CARDIOID / **CONNECTIVITY:** USB / **RECORDING SAMPLE RATE:** 48 KHZ / **FREQUENCY RESPONSE:** 20–20,000 HZ / **FEATURES:** TAP-TO-MUTE SENSOR

Seiren Mini

RAZER **$79**

Aw, it's so cute.

2 Remember earlier I mentioned that some of these microphones had to sacrifice some features? Yeah, well, the Seiren Mini pretty much gives up everything. Some people won't care because you're getting a killer mic for $80. At the same time, some other people won't get over the fact that there's no mute button. That said, the Razer Seiren Mini is one of those obnoxiously adorable pieces of hardware I instantly want to put on my desk. Its stylish pill-shaped design and colour variety give the Mini the personality lacking in some of our other choices on this list. And it sounds incredible, to boot. The Mini's super-cardioid polar pattern does a better job of tapering down background noise to focus on what's in front of it, though it does sound a bit softer than the Seiren Emote at its default gain. HyperX's mic does sound slightly better than the Mini but not by much, which is an impressive feat on its own considering how much the SoloCast has impressed us.

PC PowerPlay **VERDICT**

- Pill-shaped design
- Great sound
- No mute button

SPECS POLAR PATTERNS: CARDIOID / **CONNECTIVITY:** USB / **RECORDING SAMPLE RATE:** 48 KHZ / **FREQUENCY RESPONSE:** 20–20,000 HZ / **FEATURES:** TAP-TO-MUTE SENSOR

DOES A GREAT JOB OF PROVIDING A DECENT-SOUNDING MICROPHONE FOR PODCASTERS AND STREAMERS ON A BUDGET.

3

Audio Talk GO

JLAB $59

Best of the rest.

3 The JLab Audio Talk GO had long been my benchmark for cheap and compact microphones. It still does a great job of providing a decent-sounding microphone for podcasters and streamers on a budget, and its small stature and companion stand are perfect for anyone looking for a microphone that travels well and doesn't take up much space on your desk.

Even though the GO only has a pair of condensers, the sound of my voice still came out better than expected, although a bit tinnier than I would like. You may not be recording the next hit single on this microphone anytime soon, but it is great if you're dipping your toes into the streaming or podcasting scenes.

I've tested a few different mics from JLab Audio. Given its history in the affordable audio space, it's no surprise the Talk GO was the USB microphone that impressed me more than its more expensive offerings, the Talk and Talk Pro. The Talk GO is a great microphone without sounding or feeling cheap.

PC PowerPlay VERDICT

- Good starter mic
- Subtle RGB
- Portable design

SPECS POLAR PATTERNS: CARDIOID, OMNIDIRECTIONAL / **CONNECTIVITY:** USB / **RECORDING SAMPLE RATE:** 96 KHZ / **FREQUENCY RESPONSE:** 20–20,000 HZ / **FEATURES:** TRIPOD

Nano

BLUE YETI $149

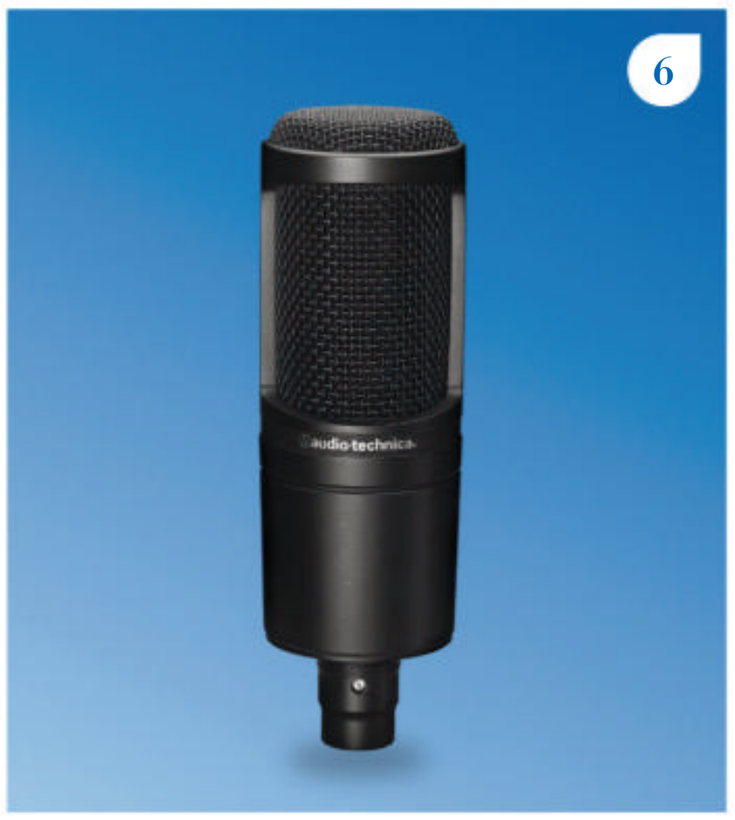
Feature-packed and compact.

4 This miniature version of the classic Blue Yeti is the perfect microphone for those just starting with streaming. It has an excellent sound quality for a product under $150 and it offers gain control and a mute button on the device. Also its tiny size and lightweight metal build make it easy to transport (this is at least 40% smaller than its larger cousin), which is handy if you need to travel around. The downside is the Yeti Nano sits as an outlier as the most 'expensive' budget mic I've considered for this list, but at least it offers more than the cheaper mics by way of features. Its 24-bit, 48 kHz recording sample rate makes is noticeable, too – putting audio from the Nano and original Yeti side by side reveals that the former is superior by quite a margin. It's only got two polar patterns (cardioid and omnidirectional) but the Yeti Nano more than makes up for it with everything else. Definitely the option to go for if you're desperate for shortcuts.

PC PowerPlay VERDICT

- Very small and light
- Easy to use
- Great sound quality

SPECS POLAR PATTERNS: CARDIOID, OMNIDIRECTIONAL / **CONNECTIVITY:** USB / **RECORDING SAMPLE RATE:** 48 KHZ / **FREQUENCY RESPONSE:** 20–20,000 HZ / **FEATURES:** ZERO-LATENCY MONITORING



WHAT IS A POLAR PATTERN AND WHICH ONE DO I NEED?

A polar pattern determines how much and from which direction an audio signal will be picked up by a microphone. For gaming, you'll mostly want a pattern that picks up sound directly in front of the microphone (you) and not much else from anywhere else (the environment).

For that you'll want to use the most commonly found polar pattern for gaming microphones: cardioid. This records in front of the microphone and minimises sound from elsewhere. A few popular patterns are:

Bidirectional – captures audio in front and behind of the mic.

Omnidirectional – picks up sound from every direction.

Stereo – perfect for ASMR, if you're into that.

NT-USB-Mini

RODE $135

Multiple USB microphones ahoy!

5 Rode no question makes quality microphones, though with its high-end credentials, prosumer audio often requires a bit of financial investment. Slightly bucking that trend while still being one of the more expensive microphones in this list, the Rode NT-USB Mini makes a name for itself as hands-down one of the best mics you can pick up right now for less than $150.

Aside from sounding incredible, the NT Mini is an easy-to-use mic that any beginner can plug and play. Speaking of easy, the Rode Connect software is a digital mixer that actually allows for up to four NT Minis to be plugged into a single computer without jumping through any hoops. That's a godsend if you're desperate for a multi-mic setup via USB, which can be tricky at the best of times.

The NT Mini follows the same design philosophy as the other mini mics on this list by being compact and easily transportable. So that's a plus. But most of all, it's a cool-looking and high quality piece of tech.

PC PowerPlay VERDICT

- **Great sound**
- **Simple compact design**
- **Rode Connect software**

SPECS POLAR PATTERNS: CARDIOID / **CONNECTIVITY:** USB / **RECORDING SAMPLE RATE:** 48 KHZ / **FREQUENCY RESPONSE:** 20–20,000HZ / **FEATURES:** ZERO-LATENCY MONITORING, MUTE & HEADPHONE VOLUME CONTROLS

AT2020

AUDIO-TECHNICA $145

The cheaper XLR option.

6 Audio-Technica AT2020 might be the best cheap XLR microphone you can get your hands on right now. Any professional musician will tell you that trying to find a good XLR mic for less than $250 is a massive chore, yet somehow Audio-Technica manages to provide one for a measly $145. That's pretty cheap by XLR standards. The AT2020 follows the trend of stripping out features to cut costs, though, and that means no mute button. Luckily you still have headset volume and monitor dials, a handy stand mount and a travel bag included in the kit.

Whenever you record yourself using the AT2020, you'll often think you're using a more expensive microphone. And that's what makes it worth it. The AT2020 is a highly versatile microphone, too. Since it is an XLR connection, you will also need to invest in an audio interface. But if you can't be bothered with that, you can pick up the more expensive AT2020USB+, which is the same except it's USB.

PC PowerPlay VERDICT

- **Well-built**
- **Great for musicians too**
- **Only on polar pattern**

SPECS POLAR PATTERNS: CARDIOID / **CONNECTIVITY:** XLR / **FREQUENCY RESPONSE:** 20–20,000HZ / **FEATURES:** STAND MOUNT, CONTROL DIALS, TRAVEL BAG

GROUP TEST

PC WEBCAMS

Take a peek into the wonderful world of webcams. *By Katie Wickens*

Sure, you could stick to making TikTok videos on your phone, but if you're serious about making a professional impression on the web, a quality webcam could be your first step toward internet fame and fortune. In fact, a world without webcams doesn't bear thinking about.

Without them, the well-loved world of Vloggers and Twitch streamers would be all but diminished, along with your chance to make a name for yourself as an internet personality.

If that thought has you excited, or if you just need to appear less pixelated, or prove you're out of bed in online meetings, it's time to have your face witnessed by a crystal-clear, high-definition webcam.

The main considerations in choosing a camera are image quality, ease of use, software utility, and whether the built-in microphone is any good.

Facecam

ELGATO $299

Sensational, speedy streaming and easy setup.

1 This is Elgato's first ever webcam, and it took the web by storm. In fact, it turned out to be every streamer's dream. The Facecam delivers superb picture quality, couched by easy to understand software that lets you adjust your contrast, exposure, and FoV on the fly. And all that goes into a totally uncompressed 1080p video stream, shot at a swift 60fps.

Sure, it's not the highest definition camera out there, but who needs 4K resolution when you've been granted such an easy set up and picture quality to rival that of the Logitech StreamCam. Having knocked it off the top spot in our eyes, the Elgato Facecam has taken the crown among streaming-focused webcams.

OK, so it may be a little on the expensive side for a 1080p webcam, but it's worth every penny to take your streaming to the next level. If it's effortless set up, badass image quality, and high frame rate you're looking for, then the Elgato Facecam is the cam... for your face.

PC PowerPlay VERDICT

- Fixed focus
- Great software
- Uncompressed 1080p video

SPECS DISPLAY RESOLUTION: 1080P @ 60FPS / **FOV:** 83.2 DEGREES / **SPECIAL FEATURES:** CAMERA HUB APP

StreamCam

LOGITECH $229

Versatile command over content creation.

2 With the flexibility to switch between landscape and portrait mode in the blink of a shutter, the StreamCam puts versatile content creation at the heart of its design. You can record something meant for scrolling on a phone screen, then quickly flick back to a standard landscape format. And being a smart cam, it takes the stress out of manually focusing when you're constantly faffing around with your setup.

Recording in 1080p resolution at 60fps means you can capture silky smooth footage. Even in low lighting conditions, the StreamCam's focus remains consistent and the picture quality hangs in there, regardless of what the lighting setup happens to be. Plus there's a cool app to go with it.

The only real drawback, aside from it being a bit on the expensive side, is the short cable that comes with it. Don't expect to be setting up your camera too far away from your PC unless you have a spare USB Type-C cable lying around the house.

PC PowerPlay VERDICT

- Great picture quality
- Excellent face tracking
- Works well in low-lighting conditions

SPECS DISPLAY RESOLUTION: 1080P @ 60FPS / **FOV:** 73 DEGREES / **SPECIAL FEATURES:** PORTRAIT ROTATION

WITH PERFECT WHITE BALANCE AND SATURATION, THERE'S LITTLE TO COMPLAIN ABOUT HERE.

Brio

LOGITECH **$269**

Brilliant 4K shots, with some faff.

3 There's a reason there are so many Logitech cams on this list: the company sure knows how to make a webcam. Where it's fallen down here, however, is with a buggy autofocus and some minor auto-contrast issues. Still, with a bit of manual tweaking, that doesn't detract from the Brio's brilliant resolution options, great field of view and fantastic image quality.

The cam's low light performance is great, and even with really very little light there's not a tremendous amount of noise. With perfect white balance and saturation, there's little to complain about here. It's even got an infrared sensor, meaning it works with Microsoft's facial sign-in feature, Windows Hello.

Despite all this, there's still not a huge demand for 4K cams. I'm sure this is owing in part to the recent awkwardness in acquiring components that can handle such high resolutions. Still, with HDR compatibility and great image quality, this is a great choice for those whose PCs can handle it.

PC PowerPlay VERDICT

- Superb image quality
- Supports HDR recording
- Dodgy auto contrast

SPECS DISPLAY RESOLUTION: 4K @ 30FPS, 1080P @ 60FPS, 720P @ 90FPS / **FOV:** 90 DEGREES / **SPECIAL FEATURES:** WINDOWS HELLO COMPATIBLE, HDR-ENABLED, 5X DIGITAL ZOOM

Kiyo Pro

RAZER **$299**

Low-light champion with a colourful twist.

4 At the top end comes the Razer Kiyo Pro. A little on the expensive side, but with plenty of great features to make up for it. Here, you get sensational sharpness and great white balance. Paired with exceptional colour saturation, the Kiyo Pro really puts the others you see here to shame in bright light. And although in low light it can get a little washed out, the onboard ring light helps deal with the worst of it.

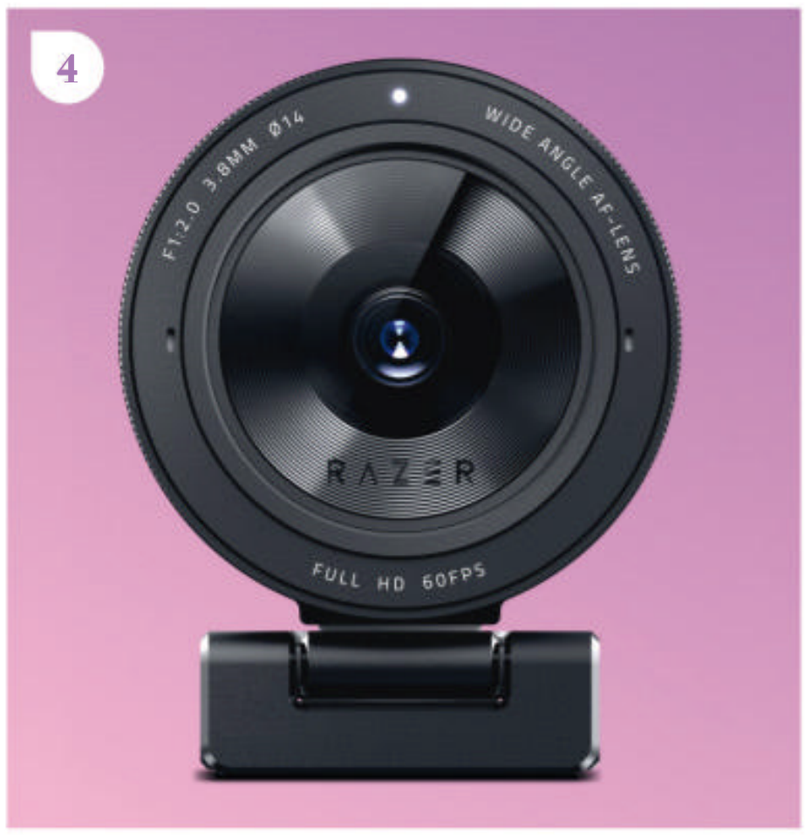
Even in the pitch blackness of a midnight streaming lair, however, the Kiyo Pro manages to produce a great image. Its adaptive light sensor means no matter what lighting conditions you find yourself in, this cam should be able to make it work.

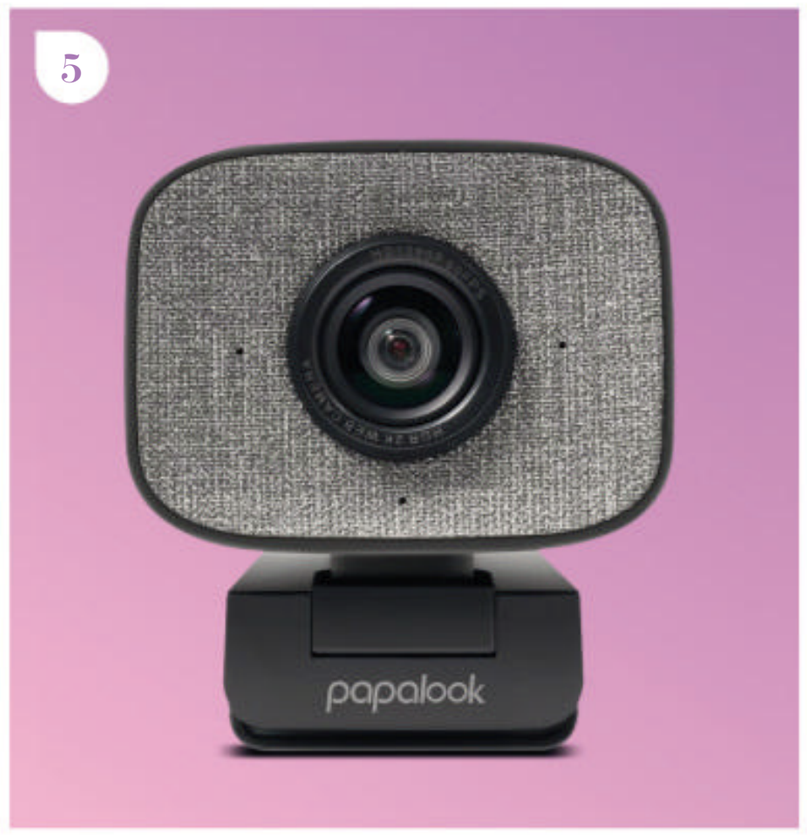
The versatility of the Kiyo Pro's field of view is also pretty nifty, but at wider angles it does produce a slight fish-eye effect. For some, perhaps the surrealists among us, this may be exactly what you want. For the majority of users though, the standard 90 degrees should be more than enough.

PC PowerPlay VERDICT

- Ring light makes up for low light
- Natural saturation boost is great
- No driver software

SPECS DISPLAY RESOLUTION: 1080P @ 60FPS / **FOV:** 80, 90, 103 DEGREES / **SPECIAL FEATURES:** OMNIDIRECTIONAL MICROPHONES, ADAPTIVE LIGHT SENSOR, HDR-ENABLED





LIGHTING TIPS TO IMPROVE ANY WEBCAM SHOT

The first step to improving your video quality is fixing the lighting. Regardless of how spectacular the webcam, a badly lit studio could negate some of that technological advantage. Start off by dimming harsh back-lighting. Think of how environment artists draw your attention to quest items: a bright background will detract from the focal point.

Then grab a desk lamp and either point it at a white surface behind your monitor for some soft bounce light, or strap some white paper to it to diffuse the light. Either will reduce shiny spots on your face, but the latter provides more control. Then just reduce your screen brightness, particularly if you wear glasses, and adjust the webcam's white and colour balance until you look vaguely human.

PA930

PAPALOOK $99

An affordable, no hassle QHD alternative.

5 The Papalook is not a webcam you're going to want to reference out loud, if only because of its unfortunate name. It is a capable 1440p webcam for an affordable price, though. That's a small win in my books, if only because the past year it has been dreadfully difficult to get your hands on anything close to a reasonably priced webcam.

The Papalook offers a perfectly adequate picture quality out of the box. It's bright enough that you won't necessarily want to fiddle with the settings right away, and it's surprisingly decent in low-light conditions. It is, however, let down by poor software, which unfortunately can limit some of its functionality. With an included privacy cover and sturdy stand, the Papalook offers an okay alternative to more pricier webcams on this list. If you only want to beam your face across the internet, it can do just that with little fuss. Just don't expect it to be a match for more high-end units – I'd recommend the C922 over the PA930 any day.

PC PowerPlay VERDICT

- **Affordable alternative**
- **Ready to go out of the box**
- **Lacking features and functionality**

SPECS DISPLAY RESOLUTION: 1440P @ 30FPS / **FOV:** 90 DEGREES / **SPECIAL FEATURES:** DUAL MICS, PRIVACY COVER

C922 HD Pro

LOGITECH $159

A standard, stalwart little webcam.

6 Here we have the middling model, the one most people can appreciate. The Logitech C922 HD Pro comes in at a good price to performance ratio and unless you need something very specific from your webcam, this may be the best everyday solution. The camera's noise levels stay at a respectable level when confronted by dimmed lighting conditions, meaning the low light performance is pretty great. In bright light however, although the 1080p image comes out looking quite sharp, the default saturation can make it look a little washed out. So some adjustments may be needed to make the most of the C922 HD Pro.

Still, the software and Logitech's Camera App make the cam pretty versatile, and there's great compatibility with the ChromaCam background replacement app, to boot. As the cheapest one on the list, with an alright field of view, fantastic autofocus and great picture quality, this is a really good starter buy.

PC PowerPlay VERDICT

- **Great picture quality**
- **Affordable**
- **Limited to 30fps**

SPECS DISPLAY RESOLUTION: 1080P @ 30FPS / **FOV:** 90 DEGREES / **SPECIAL FEATURES:** DUAL MICS

ADVERTORIAL

ASUS ZENWIFI

WHAT'S THE IDEAL MESH FOR YOUR HOME?

The 'home office' is here to stay. For many, working at least partially at home will be a way of life going forward, and a strong Wi-Fi solution that lets you maintain a fast, secure connection from anywhere in the house is important. Whether you want to take your laptop outside for a meeting, upload huge, important files, download the latest games on a home PC or console while doing data-heavy work, or even just scroll your social media on your phone from a bedroom far away from the router, it can be difficult to feel fully connected when your Wi-Fi setup isn't as strong as it could be.

ASUS' range of ZenWiFi Mesh systems presents an ideal solution for a data-heavy home. A mesh system involves a series of strategically placed routers within your home that provide full coverage: it's especially handy for large, multi-level homes, or if you have multiple heavy data-use devices spread between different rooms. The ZenWiFi XT8, XD6, and XD4 models each offer unique benefits, depending on your needs, and are each compatible and compliant with Wi-Fi 6, the latest standard in wireless internet. The big advantage of Wi-Fi 6 is that it allows for many more simultaneous devices to connect than previous iterations: extremely useful as our homes become increasingly 'smart'. Thanks to Wi-Fi 6, congestion and signal interference can be a thing of the past. ASUS' ZenWiFi mesh systems also support other advanced features, such as two-way OFDMA (which reduces latency for a more responsive Wi-Fi experience communicating with multiple clients.) and MU-MIMO (which allows each antenna stream to communicate with different clients at the same time) as well.

The ideal choice of equipment varies between different environment and application the MESH setup needs to serve. For instances, you may want to have 4x4 stream over 5GHz band such as the ZenWiFi XD6 in traffic intensive environment to service these demanding clients without delay. If you desire for the absolute top performance without wired backhaul (link between nodes), tri-band MESH setup such as the ZenWiFi XT8 is the way to go. ASUS ZenWiFi is designed to cater different environment and applications in needs.

Mesh systems place routers throughout your home, to maximise coverage for your all your connected devices.

DITCH THE WIRES

Tri-band solutions such as the ZenWiFi XT8 are most ideal for environments without the luxury to run cables between each node, whether for practical or aesthetic reasons. Thanks to its dedicated 4x4 stream wireless backhaul, traffic gets to travel between nodes without delay. The connection speed on satellite units is mostly the same as those to the main router. You won't suffer a loss in speed even when you're connected to the node serving the wireless communication at the other end of the house. It's also equipped with a USB 3.1 GEN1 port,

meaning it's the one you should get if you would like to access features such as 4G/LTE backup. Even in an entirely wired ethernet backhaul setup with heavy data use across multiple devices in the same room – in a shared office, for example – this system has a key advantage. Both 5GHz bands can be made available, meaning that you have access to more of the 5GHz spectrum, allowing even more devices to be connected at once. The XT8 is a great choice whether the nodes work with or without cable between them.

If this doesn't describe your home environment, the ZenWiFi XD6 could be a better fit for you. If your most traffic-intensive tasks are going to be performed closest to the main unit rather than the satellites, then the XD6 gives you the advantage of opening up four streams 5GHz for devices, compared to two in the XT8. This means that you'll see better performance when working near the main router: ideal for homes where the router is set up in a data-heavy workspace. If you need 160MHz bandwidth support in either a fully wireless or ethernet environment, the XD6 also has you covered. This lets you tap into higher speeds across low channels, which is excellent when you really need the best speeds possible for the device you're working on. The XD6 is ideal for a network that is partly wired and partly wireless too, with some more flexible options depending on your setup.

The ZenWiFi XD4 is a great option for a less intensive home environment that isn't quite as data heavy. If you're working with an NBN speed below 250Mbps, for instance, and don't require too much local transmission, and not needing to go through multiple nodes to reach the primary node (main router), this will make a good starting point to prevent loss of speed further from the hub. If you have an Ethernet connection but do not require 160MHz bandwidth, or are running fewer than 20 devices on each node at the same time, then this could be the mesh solution for you. While not as intensive as the other two models, the ZenWiFi XD4 still has many of ASUS' high-quality features, including AI Protection Classic (which is available in the other models), auto-sync support, and full access to WiFi 6 features and benefits.

SIMPLE TO SET UP

Whichever system you choose, you can also rest easy knowing that the set-up process is extremely straightforward. It's a simple three-step process: turn your new ZenWiFi on, create a new WiFi network name and admin account, and wait a few minutes for the system to start working its magic. This one-time setup auto-syncs across every hub in the package, meaning that you need almost no tech knowledge to set it up and dramatically improve your wireless internet. Each unit can work as either the main router or an extended node, giving you a lot of flexibility over your layout. The ZenWifi range is also compatible with numerous other compliant AiMesh routers, including ASUS gaming routers.

If you're looking to improve your work-from-home set-up and handle data-heavy workloads with ease, an ASUS ZenWifi Wi-Fi 6 MESH system will give you a wider coverage and more flexible, more secure, faster home Internet environment. Wi-Fi 6 MESH setups are ideal for handling multiple data-heavy tasks at once, so you can stream HD media and download the latest games without worrying about the speed of your uploads or the possibility of a laggy Zoom call. For many people, secure home internet is becoming more and more of a necessity: with ASUS ZenWifi, you can rest easy knowing that your needs will be met.

The Asus ZenWiFi range is stylishly designed to look good anywhere in your home.

Setting up a network with ASUS ZenWiFi is easy, with just three easy steps you can use with your smartphone.

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EAST MOVES WEST IN

TOTAL WAR: WARHAMMER II

PART I

Can stubborn dwarfs colonise the far side of the world? *By Matt Elliott*

There is such a thing as a dwarf ranger, but they're viewed with suspicion. In dwarf society, all that sun and fresh air is considered bad for your health. So the idea of taking an army from the cool, comforting holds of the World's Edge Mountains all the way to the westernmost part of the Mortal Empires map in *Total War: Warhammer II* is a fool's errand. Only a wazzock would contemplate such a thing. I'm proud to say I am that wazzock.

First, I need to pick a goal. I choose the Fallen Gate, a savannah settlement on the western fringe of the map with a climate inexplicably suitable for dwarfs. This involves a bit of planning, which feels like cheating, but it's a necessary concession. In my head, it's an ancient dwarf myth: a new world suitable for the sons of Grungni, where smooth stone sleeps under jungle fronds. There are other rules to establish. It would be easy enough to amass a huge force led by a powerful character and flatten whatever unsuspecting race we find holed up at our destination. But there's no way High King Thorgrim Grudgebearer would take this journey; that would be like your racist brother-in-law holidaying further east than Great Yarmouth. Instead, he'll stay behind and maintain our second objective: ensuring my capital, Karaz-a-Karak, stays out of wretched orc hands.

This is a travel diary, then, but we need to do some housekeeping. I must secure the local area, reclaiming The Pillars of Grungi and Mount Squighorn, then move east to take Mount Silverspear, an abandoned settlement that will serve as my starting point. I hope it isn't infested with skaven. I also have to upgrade my holds and amass the resources I need to recruit a competitive force. There's no point crossing the entire map with an army of capering beardlings only to fall short at the final battle.

I investigate Mount Silverspear. It is, of course, infested with skaven. Flushing away their filth is easy enough, but it does mean I have to declare war on another faction. Not ideal. I recruit a new lord here, in line with rules one and two, but I'm not intending to retain control of this area. The dwarf leading my expedition is Yadri Growlsh. He's solid, simple, reliable. The Volvo of fantasy figureheads. He sets off from Mount Squighorn, knowing he'll likely never see his home again (not least because the skaven will take it back in about three turns). Axe slung over his shoulder, Yadri begins the long journey east, which, if I'm honest, will involve an extended stay at Karaz-a-Karak while I muster his throng. It's something of a false start, then, but if the Fellowship can spend months at Rivendell, Yadri's allowed to linger at Everpeak while his army assembles.

THE RULES

1. My lord must travel from Mount Silverspear to the Fallen Gates.
2. My army can't be led by a special character.
3. My capital, Karaz-a-Karak, must survive.

HIKE AND SHOT

Like packing to go on an extended city break, I'm being extra cautious. But instead of including spare chinos and wrapping everything in tissue paper, I've decided to take two cannons. Nobody of sound mind would drag a cannon

NOBODY OF SOUND MIND WOULD DRAG A CANNON ACROSS THE ENTIRE MAP.

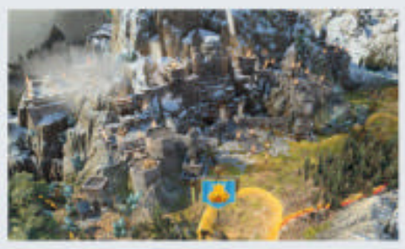
across the entire map. So imagine how surprised my enemies will be when I turn up with two. It's genius. I give them runic dwarven names I probably shouldn't share because a) it's against dwarf laws to translate Khazalid and b) I don't want you to wedgie me, but here goes: Rinn Vengryn ('Lady Vengeance') and Dal Gnol ('Old Reliable'). I built a brewery during my period of consolidation, which lets me recruit Bugman's Rangers. On the long, parched journey that lies ahead, I like to think these ale-swigging dwarves will offer a taste of home for our intrepid heroes. My army is rounded off by The Growlsh Grumblers – a unit of moaning Longbeards who don't really want to go on the journey, but are dragged along to keep the beardlings in check.

Just as I'm about to set off, something unexpected happens: I complete a quest that awards me with a new runesmith called – wait for it – *Dramar Growlsh*. This can only be the ancestor gods telling me that Yadri's bookish older brother is destined to join the quest. We don't know what we'll find in the east, but we know it's the province of (ugh) magic users, so Dramar's skill in dampening enemy spellcasters – be they dark elf, lizardman, or worse – will come in useful.

I feel a sense of genuine excitement as my army crosses the threshold and leaves their homeland behind. We wave goodbye to Thorgrim Grudgebearer – well, it's more of a curt nod, really – who stays behind to guard Karaz-a-Karak. I leave him just enough troops to keep things running. Money is going to be an issue because it costs loads to keep two decent-sized dwarf armies, and I haven't expanded far, instead choosing to upgrade what I've got.

Yadri's Rangers pass settlements full of spider-worshipping goblins, and soon reach the realm of the Border Princes – haughty humans that too often end up being an additional distraction in dwarf campaigns. I manage to pass them without event, though, and even make time to negotiate a new trade

POSTCARDS FROM THE WORLD'S EDGE *Wish you were here?*



"Leaving Karaz-a-Karak. Is it too early to send a postcard? Also, I forgot my lunchbox, what am I going to eat now?"

"Athel Loren. Hate it. Hard to breathe the fresh, leafy air and the trees keep giving my axe funny looks."

"My first trip in a Dreadnought! It's like being inside an Ironbreaker who can float. Not as bad as it sounds."

"Sailed past Ulthuan, where even the mountains look weak and elfy. Don't bother unless you're invading."

"Finally arrived! It's flatter, hotter, and greener than expected. Can I come back home now?"

deal on the way past. I pass other lowland dwarf holds and strike non-aggression pacts. Where possible, I also push for military access. Races don't take kindly to trespassing in *Warhammer II*, plus I like to think of my dwarf brothers waving me by as we trudge to our destination, like the world's slowest, least-fun fun run. Perhaps 'grumble strut' is more accurate.

I take the route through The Vaults, an area of ice-cut valleys and towering cliffs that forms the junction between the Black Mountains and the Grey Mountains. It's also the home of my dwarf brethren from Clan Angrund, although they're not especially keen to see me, probably because of the trespassing, enmity, and siege weapons. From here, I have a choice: northwest, through the horrible wood-elf forest of Athel Loren, or southwest through Tilea, on a potentially longer journey. I decide to go through the woods, because I know the elves will hate it, and the thought of that delights me.

It's around now I realise that things at home aren't great. I've dealt with constant minor incursions, but the powerful Black Orc Warboss Grimgor Ironhide is lurking about to the west of Karaz-a-Karak. I rush the High King back towards the capital, knowing that a siege battle would favour me. I'm too late. Grimgor attacks before I can get inside the city walls, but my army is close enough that reinforcements arrive from inside. It's a massive battle – one that sees both Grimgor and Thorgrim wounded – but even though I win, it leaves me in a perilous position. My roaming army is too depleted to see off any other serious threats, and my coffers are running dry. Army upkeep is crushing me, so I have to make a hard choice: some of Yadri's Rangers will never reach the Fallen Gates. I say goodbye to a unit of Slayers and, more tragically, one of my beloved cannons. The only thing that makes me feel better is pretending I flytipped it in the stupid wood-elf forest. At least it's not a mattress, lads.

ELF RISK

In typically melodramatic overreaction, the wood elves declare war on me – I guess they found Dal Gnol – but they're too late. Yadri reaches the coast, and is ready for the last big challenge in his journey: crossing the sea to reach the New World, sailing past the high-elf homeland, ideally while shouting rude things out the portholes of our dreadnaught. And it's a good thing, too. Time is getting short. My diminished forces in the east can no longer hold back the green tide. My settlements start to fall, and money gets even tighter. I'm in negative growth and don't have enough cash to recruit a new army. I bunker up in my capital city and hope that the high-tier garrison there is enough to weather any orc attacks. Another greenskin army arrives, led by Gorfang Rotgut, and lays siege to Karaz-a-Karak. I have to hope they don't attack before Yadri reaches the Fallen Gates. Thirteen turns. It's going to be very tight.

I'm barely at Ulthuan before Gorfang assaults the city. Yadri doesn't know it, but back on the other side of the world, his homeworld is on the brink, and the mission hangs in the balance. The only unit I have aside from the garrison is Thorgrim himself. It's enough. Gorfang's attack breaks on the walls of Karaz-a-Karak, but it's a close victory – I'm not sure the city would take another attack from a larger force.

Meanwhile, Yadri sails past Ulthuan, pausing only to laugh at the repulsive river troll hag that seems to be harassing the capricious elvish waifs. I'd be enjoying this sightseeing tour much more if the future of dwarf civilization wasn't hanging from a beard hair. And, to make matters worse, just as I'm about to reach the other side of the map Grimgor Ironhide calls a Waaagh! against Karaz-a-Karak. It's now a case of not *if* the city will fall, but *when*. I have enough gold and resources to upgrade the city to the next level. If I

The defence of Karaz-a-Karak.

AS I'M ABOUT TO REACH THE OTHER SIDE OF THE MAP, IRONHIDE CALLS A WAAAGH!

can do that, the garrison will increase and Everpeak might last long enough for Yadri to reach his destination.

MOUNTAIN MEN

To the east of Karaz-a-karak, Mount Squighorn is overrun. It's just the capital city left. Grimgor's Waaagh! arrives, and the final siege of Karaz-a-Karak begins just as Yadri strikes ground in the New World. It's going to come down to a single turn, like the last ball in an excruciating game of cricket; one that includes goblin doomdivers and snotling pump wagons. Yadri steps into the sweltering fug of the Isthmus of Lustria, the northernmost part of the jungle continent, surrounded by strange idols and mystifying lizardmen. The race is on to reach the Fallen Gates, and I still don't know what waits for me there or if my depleted, attrition-ravaged army will be strong enough to take the city. At the end of every turn, I find myself wincing as the factions spin past at the top of the screen, praying it doesn't stop on Grimgor's 'Ardboyz, signalling their final attack on my capital.

I'm one turn away from the Fallen Gates when it begins. An overwhelming force marches on Karaz-a-Karak. It's an epic fight, but an impossible one. Eventually Thorgrim himself falls, felled by a black orc warboss at the city gate. The quest has failed. The next turn, Yadri, marches on the Fallen Gates and takes on its lizardmen defenders. It's an even fight, but one that goes my way, largely in part to Rinn Vengryn, which batters the heavily armoured saurus troops before they can reach me. Part of me imagines what I could have done with two. Another part asks if I'd have succeeded if I left sooner. The Fallen Gates are mine, but the greatest dwarfhold in the Old World is lost. Maybe it's time for Yadri to go home... ■

TOP: Nothing feels quite as good as leaving a horrible forest.

LEFT: Are lizardslayers a thing? They are now.

FAR LEFT: The newly-established dwarfhold of the Fallen Gates. Probably the capital now...

VOXELS

Who needs polygons when you have blocks? *By Joseph Knoop*

LEFT: Tasty fish.

Rather than learning to make bread, my desperate quarantine hobby turned out to be learning voxel art. Using the fantastic MagicaVoxel software, I went from building abstract animals to building illuminated *Dance Dance Revolution* machines, quaint Japanese storefronts and even the subway tracks outside my apartment. Most importantly, voxel art has given me an appreciation for the amount of work that goes into a game's visual design, especially when it's consciously constrained, not necessarily sacrificing style or substance. From trendsetters like *Minecraft*, to physics experiments like *Teardown*, to narrative adventures like *Cloudpunk*, voxel art has changed the way I look at almost everything I play.

If the last year has taught us anything, it's that many game devs shoot for the moon, but also like Jeff Bezos, barely manage to get anywhere while blowing big bucks.

As a lowly courier driving a floating car through a Blade Runner-esque city, *Cloudpunk*'s voxel art buildings are stunning despite having nowhere near the polygon count of that other cyberpunk game. If there's one thing voxels are good at doing, it's making low-poly scenes look beautiful from a distance. As I drive by giant neon advertisements for ramen and corporate security firms, little blocks of light a few hundred yards down hint at the life and squalor the city's lowest classes trek through each night. A street sweeper robot scuttles by a food stand, while a junkie hocks his wares and a gentleman of the night takes a drag of his cigarette outside a dimly lit diner.

Of course, zoom in close enough and the food stand's produce is just a mix of orange and green blocks, the butcher's knife is a simple square affixed to a brown stick, and the smoker is lifting a single lit cube up to his face. Really, it's unfair how well voxel art works with the cyberpunk aesthetic in particular. The genre has always had a focus on imposing scale, with skyscrapers towering far beyond whatever our working class hero can afford, seemingly alien or godlike obelisks. Even at street level, cyberpunk stories are often so packed full of human and mechanical detritus that it's more important to focus on the shape of something rather than the details. Voxel art makes an artist ask, "What do I emphasise here? What sells the silhouette of something when I know I can't make something bigger than 40x40?" When you're just another cog going about their life, people tend to turn into vague shapes rather than highly defined things.

VOXEL ART MAKES AN ARTIST ASK, "WHAT DO I EMPHASISE HERE?"

DEMOLITION DISC

But take something fairly pedestrian like *Teardown*, the physics sandbox heist game that achieves a level of destruction Battlefield could only dream of. At its heart, it's a game about shapes, and destroying those shapes to get at what you want. Despite the voxel format, there's never any mistaking that you're looking at a mansion or a bulldozer, and those rudimentary shapes crumble in such a way that even my modest CPU struggles to comprehend.

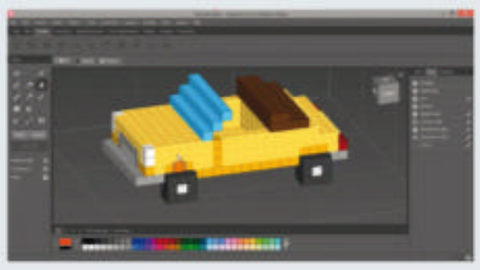
But take it from me, voxel art can quickly get away from you. When my interest in voxels eventually turned into cracking open Aseprite, a very nice pixel art creation tool, my first real piece was of a very pleasant beach, Bob Ross clouds and all. The problem was that as I went along, I kept broadening the dimensions of my beach, to the point where it wasn't obvious it was pixel art until you zoomed in, and not in a good way. The result felt like a middling Microsoft Paint doodle.

That feeling of overconfidence, of overstretching my canvas before I've learned to paint, is something I can't ever forget now looking at a game. Style can occasionally win over substance if that style works in service of a clear and meaningfully restrained vision. Each time I see the kids my partner and I babysit, the five-year-old boy has constructed a new set of houses, or a castle, or a giant underwater spaceship. Each time, he's getting more confident and maybe one day he'll get frustrated and knock it all down. But he's working with the best tools possible, these shapes that can do anything. ■

OUTSIDE THE VOX *Software for making voxel magic*

MAGICAVOXEL

A free, lightweight option that's great for static art pieces. Gets regular updates and has a great community. Did I mention it's free?



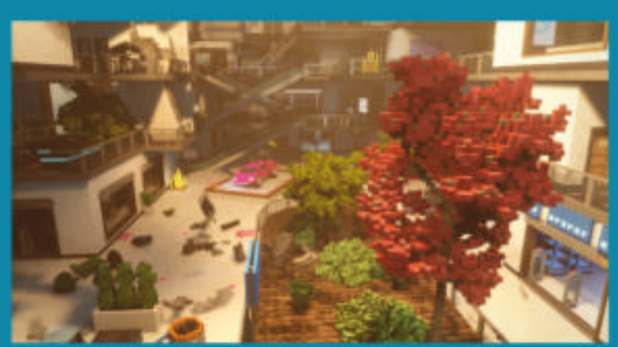
QUBICLE

Used for games like *Crossy Roads*, *Trove*, and the upcoming fishing town life sim *Moonglow Bay*. Great for character creation.

MEGA VOXELS PLAY

A mobile app for simple voxel art creation. Works well with other software and even has a shop section to find new models.

LEFT: Digging it.



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